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It will be of advantage, in view of the dissemination of the usual practice in the use of such improved methods as are described in the reader, that under the circumstances he is compelled to use them at least in the best ordinary practice. The mechanics are particularly mentioned, as they are glad of any new work, even at some extra expense. I am grateful for any help towards the dissemination of which both they and the author are interested.

For the discomfiture of

THE strange and hitherto totally unexplained connection of a moist atmosphere with the spread of infection has been illustrated in New York by an increased violence of diphtheria, scarlatina, and membranous croup,—which appears to have taken its place, at least provisionally, among the zymotic diseases,—following the heavy snow of the past weeks. As usual, an excessive proportion of fatal cases were reported from tenement-houses, where defective plumbing added its malignant influence to the other circumstances of crowding, cold and discomfort in encouraging infection. The Board of Health has shown a most praiseworthy activity in bringing about a reform in these places. Its hands are somewhat tied by the statute under which it acts, but it succeeds in laying them vigorously, and somewhat heavily, upon a great number of offenders. Already, more than three thousand complaints have been acted upon, and measures taken to enforce compliance with the law. At present, according to the New York *Herald*, about ninety suits against landlords are pending, but it is found that the determined action of the Board in arresting and even imprisoning contumacious owners has had a salutary effect, and its orders are obeyed much more readily now than heretofore. We hope that nothing will occur to interrupt the work which this most efficient body of officials is doing, and we commend their example to all similar ones.

THE South Side Street Railway Company of Chicago has decided upon adopting a means for propelling its cars which will be a novelty east of the Mississippi river, though it is said to be used in California. Instead of horses or engines attached to the cars, the motive power is to be furnished by stationary engines, driving a number of drums sunk in trenches midway between the tracks. Over these drums run endless cables, and the cars are fitted with means of gripping these cables and losing their hold at pleasure; so that a uniform and reliable power is always ready for use. The difficulties which will arise from snow and ice in winter can, it is thought, be overcome, and appliances already in use will be sufficient to afford means of turning corners easily. The system is costly; fifty thousand dollars per mile being the estimate for applying it to the Chicago tracks; but the saving in operating expenses will be great enough to pay interest on the outlay required. It will occur at once to all who know anything of the management of elevated railways that if this device is successful for surface lines, it must be infinitely better adapted for those raised in the air, where cables and drums can move at any desired speed without fear of obstruction, and where the advantage gained by abolishing the smoke and noise of locomotives would be so great.

THE Panama Canal scheme pursues its uneven course, amid the extravagant depreciation of its enemies, and the hardly less extravagant praises of its friends. The former assert that by a recent change in the by-laws of the association the first forty million francs raised are to be distributed among the projectors of the enterprise, and they predict that as soon as this part of the work is completed, the remainder will be indefinitely postponed. On the contrary, the new President of the Canal Company expresses his conviction that the undertaking will be carried out, and will prove financially successful. In fact, it would not surprise him to see two canals built, and he thinks there will be business enough for both, if this is done. Meanwhile, Captain Eads has been busy in obtaining a "concession" from the Mexican government for his Tehuantepec ship-railway. The concession grants right of way, and a small subsidy, in return for the privilege, which would be of great value to Mexico, of having its ships and munitions of war transported free of charge; and in ninety-nine years the whole may be taken by the Mexican government on payment of two-thirds the cost. The most conspicuous feature of the concession in the eyes of ship-owners will be the permission granted to Captain Eads and his company to charge a toll on every vessel conveyed not exceeding five dollars per cubic metre of displacement, besides fifteen dollars each for passengers, and one per cent on the value of bullion or precious stones. This enormous toll, amounting to nearly seven dollars per ton, would, we should say, if actually imposed, practically prevent the use of the road, especially for steamers, which would have to pay it on their coal as well as their cargo. However, as the railway is estimated to cost only about half as much as the Panama Canal, and, as the charge for passage through the latter, which is limited by the terms of its concession to about two dollars per ton, is expected to pay a profit,

it is likely that moderate tolls will be found in practice the most remunerative to the railroad company.

THE elevated railway excitement in Boston seems to have subsided, and indeed, there does not appear to have been at any time cause for serious alarm. The companies, or one of them, disappointed in their application to the Railroad Commissioners for authority to run their tracks through the streets, indulged in what looks like an exhibition of childish resentment, by calling the attention of the Commissioners a second time to a route which they professed to have planned along the sides of Washington and Tremont Streets; the principal thoroughfares of the city, cutting directly through the very valuable estates fronting on them. To say nothing of the enormous value of the land which such a road would occupy, amounting to at least a million of dollars a mile, it would be necessary to destroy hundreds of costly mercantile buildings, paying not only their value, but the expense of their demolition. As the total paid subscriptions to the capital stock of the company which appeared to have this preposterous scheme in view amounted, we believe, to little more than forty thousand dollars, the Railroad Commissioners very properly disposed of the application without much formality. It is to be hoped that the next enterprise of the kind will be undertaken more seriously, if at all. It seems likely that the projected improvement of the Cambridge flats will, if carried out, lead to a renewed agitation in favor of rapid transit for that portion of the city and suburbs. Both the "Back Bay" district of Boston and the large suburban city of Cambridge are particularly in need of better communication with the business part of the city. At present, such communication as they have follows routes widely separated; but if the southeastern part of Cambridge should become densely populated and connected by a bridge with the Back Bay streets, a few hundred feet distant across the river, the main thoroughfare between the two cities would probably take this direction, and Cambridge and the West End of Boston would combine to secure a line of transportation which would serve them both.

CAPTAIN GALTON, in discussing the superiority of certain American buildings, in regard to heating and ventilation, over any to be found in England, expressed his belief that this result was due, not to the greater skill of the American architects, but to the greater scope given them to do what was needed, without stint of money. That our architects exercise a more complete control over the details of the building operations carried on under their charge than their European brethren, may perhaps be true, though our own impression is very much the reverse of this; but on reading the remainder of the discussion we are disposed to think that some, at least, of those who took part in it would find the Americans dangerous rivals in theory as well as practice. One gentleman did not quite credit the stories of the results which the architects in the States were "said to achieve." The admission of fresh air over hot pipes, for instance, which was spoken of, would on a frosty day have the effect of chilling one side of the pipe while the other side remained hot, and "under such conditions iron pipes were only too likely to go to pieces." But this novel contribution to the science of heating was less startling than a remark made, according to the *Builder's* report, by another gentleman who had travelled in America, and found the rooms warmed by stoves very uncomfortable, not only on account of their being very hot, but "because the heated wrought-iron allowed carbonic acid gas to pass easily through it." Of course, the foundation of this astonishing assertion is to be discovered in Deville and Troost's famous experiment, by which, after burning coal for a long time in a cast-iron vessel heated to a bright redness, a faint trace of carbonic oxide was found in the air outside of it. This, they thought, had passed through the pores of the iron, but we believe that the experiment has never been successfully repeated, and it is now more than suspected that the gas was formed on the exterior of the vessel, from the carbon always present in cast-iron. To deduce from this experiment the inference that carbonic acid, a very dense gas, passes "easily" through the pores of compact wrought-iron is therefore unwarranted, to say the least. We wonder that some of the speaker's audience did not remind him that steam, a far more subtle gas than carbonic acid, finds no escape through wrought-iron boiler-plates under a pressure of hundreds of pounds to the square inch, and that such plates, even of extreme thinness, are found capable of keeping even hydrogen safely imprisoned.

SOME SUGGESTIONS FOR BUILDING

THE subject upon which I propose to discuss, that I call new, but the necessity for some obligatory that we should keep that we, who are looked to to assist in our own mind, fully persuaded in our own mind, ing acts, and should have a clear of such acts.

I hold that those who erect buildings so that they shall serve the life or property of others; that is, or small, public or society meet reasonable precautions to protect those who may assemble therein should be compelled to build the risk, to the minimum, of causing the builder and the architect, for any failure causing the loss of a building or other accident, the extent, the responsibility and the cost.

Let us consider what manner wants and to what extent it should be brought in the State courts, and special local legislation may be required, little or no opportunity councils, or to selection to exercise law, for in the exercise of such law may be wholly defeated, and violated to satisfy the demands of

2. The act should be made to not, as is now almost universally This may at first seem unnecessary, considering that a small factory village may have its houses—be they as in the large city; and that the of public assemblage therein may be made houses as in the city, and crammed with what may become the largest theatre in the largest of building acts should not be confined large factory, wherever located, safeguards as the extensive manufacturing, where the same conditions to apply, whether it be in the city

3. The machinery for enforcing and effective, and power should be ment, created by the law, to prevent erecting in violation of the law, or neglect to comply with its provisions to a strict accountability, if the owner, contractor, or architect 4. Power should be given to the to issue an injunction, in terms erly applied to by the Inspector the sufficient testimony of any person in emergency.

5. The penalties under the law should be cumulative and so restrictive. I think I have shown that a law, and, consequently, it would be as be as effectively covered by city from the law.

The provisions of the *State* law applicable and those relegated to deemed necessary by each community largely upon local conditions alone.

(a) All those matters pertaining providing plank walks for passers building materials and rubbish, other provisions to promote the use of the streets.

(b) Permission to dig up the boiler-rooms under the sidewalk rules for their use, so that they should be connected therewith, including roofs by leaders, and the manner with the system of drainage, and of their discharge upon the surface.

(c) Permission to erect balconies, cornices, door and window caps, ways, and the manner in which permitted.

Let me ask, in parenthesis, to press for the removal of the provisions with such structures, in those to

1. A paper read at the Fourteenth Annual Convention of Architects, by Alfred Stone, F.R.S.A.

[Continued on next page.]

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For required. Mr. Wm. G. Preston, of Boston,
architect.

Industrial.

Boston, R. I. — The National Rubber Company, em-
ploying 1100 persons, is about to build another large
mill.

Buff, N. Y. — A cannery factory is to be built here.
The York, N. H. — Kendrick Davis & Co. are to build
another large shop.

Portsmouth, N. H. — The Portsmouth Hosiery Com-
pany is making arrangements to build a structure
100' long and 40' wide, with steam power, on Union
Street.

Spring Grove, Pa. — Extensive alterations and ad-
ditions to the paper mills of P. H. Glatfelter are
being carried out on the slow-burning principle, at a
cost of \$120,000; J. A. Dempwolf, architect, York,
Pa.

SECOND COMPETITION IN INTERIOR DEC-
ORATION.

The publishers of the *American Architect and Building*
News offer three prizes of fifty dollars (\$50) each,
for each of the three designs, submitted in accordance
with the following programme, which shall be ad-
judged of highest merit, the award being made by a
jury, the members of which are Henry Van Brunt,
Arthur Hottel, and Eugene Letang, all architects of
Boston. The conditions governing the competition
are these:

1. Every competitor, by taking part in the competi-
tion, signifies his willingness that his design be
published in the *American Architect and Building*
News, if the editors desire to publish it.

2. Each competitor is to submit two sheets of drawings,
each measuring 14 inches by 22 within the inner
framing line, the drawings being executed in pen
and ink, on smooth white paper, in a manner suit-
able for reproduction in this journal.

3. The authors of the successful designs surrender to
the publishers all property right in their respect-
ive drawings and designs.

4. In awarding the prizes used will be taken of the
merit of the designs and appropriateness of the
execution of the drawing.

5. The drawings and designs must be submitted to the
editors of the *American Architect and Building*
News, at least four days next page.]

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VOL. IX.

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THE Albany capitol is just now the subject of a great deal of newspaper talk, most of which is rather amusing than alarming; but it would appear that some slight movement continues in the great vaulted ceiling over the Assembly Chamber. The cracked stone in the southwest rib has been removed, and replaced by a sound one, but we do not learn whether Mr. Eidlitz's conjecture with regard to it, that the fracture was caused by a knot or flaw in the stone, was correct or not. Hardly had this voussoir been repaired when another, near the keystone was observed to be broken, owing, as the architect thinks, to a twisting of the rib by unequal pressure; and the ribs are now being loaded to restore the balance. A certain architect in New York, on being questioned by a reporter, expressed his opinion that the fall of the structure was "only a question of time," an opinion which we do not consider to be at all warranted by the facts so far made public; but the effect is said to be that the members of the Assembly refuse to enter the room provided for them. Meanwhile, the correspondent of the New York *World* has been making observations which lead him to the conclusion that "the whole building, with the hill it stands on, will probably sooner or later slide off into the Hudson River, carrying death and destruction to every person and thing in its course." This dreadful prospect he thinks to be the natural consequence of the circumstances under which the building was constructed. It seems that the steep hill on which the building stands is underlain by shaly rock, over which are beds of "quicksand," gravel, and "saponaceous clay." A substratum of quicksand lubricated with saponaceous clay seems indeed likely to be treacherous, and the correspondent assures us that the entire hill on which the capitol rests "is even now evidently in motion toward the river," while in other cases "whole rows of buildings have not unfrequently slid to utter ruin in this city" (Albany) owing to similar causes. If it were not for the fact that such predictions of disaster usually attend the completion of important buildings, more weight might be attached to all this testimony, but in spite of a few slight movements we are disposed to think that the Albany houses will be considerably thinned out by their "frequent slidings" before the capitol follows their example, and we have the authority of the capitol commissioners for the assurance that no immediate catastrophe is to be feared.

ALL accounts indicate a quiet but steady increase in building operations throughout the country. In New York more than a thousand houses are even now in process of construction in the comparatively small district east of the Fourth Avenue and north of Fifty-ninth Street, and many more in other parts of the city. In San Francisco, also, after a long period of inactivity, building operations have begun with much energy, and it is said that the present year will see more structures completed than the preceding five years. In Boston the past season has been unusually active, but the indications are that the next will be not less so; and Chicago also shows, with a great increase in general business, a corresponding movement in the trades connected with construction. This hopeful state of

affairs should suggest to those who are in a position to make their influence felt in such matters the importance of promoting those modifications in street lines, or improvements in construction, which a wise foresight may suggest as best adapted to give the highest and most permanent value to the buildings which the coming years will see erected.

We have to chronicle the death of two persons conspicuous in the architectural world. Henri-Martin Lefuel, one of the best known of French architects, died January 3, at the age of seventy, full, alike, of years and honors. M. Lefuel was born at Versailles, November 14, 1810, and studied architecture first under his father, and subsequently under Huvéot, entering the Ecole des Beaux-Arts at the age of nineteen. He remained a member of the school for an unusually long period, obtaining the Grand Prize in 1830. On his return from Rome, he opened an atelier d'élèves, which has long been famous among students. As usual with architects of distinguished merit in France, much public work was entrusted to his care. At the death of Visconti, he was commissioned to continue the work of connecting the Louvre with the Tuileries, and received the appointments of architect-in-chief to the Louvre, and to the castles of Meudon and Fontainebleau. He also directed, as architect-in-chief, the construction of the Exposition buildings of 1855, besides many private structures. He was long a member of the Institute of France, and at one time its President, and a Commander of the Legion of Honor, and was some years ago chosen an honorary member of the American Institute of Architects. The other loss which we have to deplore is that of an amateur, rather than an architect, but one distinguished almost as much for his personal kindness and good offices toward the profession as his attainments in his special field—the Reverend Mackenzie E. C. Walcott, precentor of Chichester Cathedral, and an archaeologist of high reputation. He devoted himself particularly to the study of the early monastic buildings and history, and has contributed many interesting papers on these subjects to the professional papers. Not long before his death he published a small volume on conventual life in the Middle Ages, which is perhaps the best authority on the subject in English.

A TERRIBLE occurrence comes just in time to enforce the observations which several of the daily papers have been making upon the insecurity of tenement-houses and small manufacturing, as now constructed. Of the latter class, the Buffalo wall-paper factory will serve as an example not easily forgotten; while the condition of thousands of the former is no better than that of a building recently standing on Madison Street, New York, which was, like most of its kind, supplied with one wooden staircase only, although it possessed a so-called fire-escape extending from the upper stories to the yard. Fire was set at the foot of the stairs, by the overturning of a plumber's gasoline stove, and passage over them thus immediately cut off; and as soon as the windows were destroyed by the heat, the flames and smoke rushed out, encircling the iron escape-ladder, so as to render that useless; and fourteen occupants of a building fitted up in compliance with the requirements of a strict building law were burned to death. Sad as was their fate, it is only that which must sooner or later befall many others, even of those who fancy themselves the most secure. Hundreds of persons who are at this moment occupying their beautifully furnished rooms, at high rents, in the so-called "apartment houses," particularly of Boston, where buildings of this class are as a rule very badly planned in this respect, would be no better off than the poor lodgers in the Madison Street rookery, if a little flame should once be drawn into the elevator shaft around which their elegant staircases wind. It is of small use to call attention to single instances; a thorough and sweeping reform in the modes of constructing and arranging such buildings is necessary, and the indications are that such a reform is not far distant.

THE Boston *Herald*, in a recapitulation of its excellent series of articles on unsafe buildings in that city, discusses the means of promoting better construction. It speaks particularly of the dangerous manner in which steam-pipes and furnace-conductors are constantly put up in close proximity to wood-work, and thinks that the underwriters might with advantage adopt a system of inspection to enforce proper precaution in these particu-

WHEELING, W. VA., Dec. 2, 1880.

Dear Sirs,—I will please give me a reference in the following case. I was employed for a stated sum of money to furnish the drawings and superintend the erection of a four-story iron-front building. The drawings for the iron-work, including the elevation and all details, were given to the contractors to make their patterns and cast the fronts from. While in their possession, and about the time the first story was finished, ready to be put up, the foundry and pattern-shop burned down, and all the drawings were destroyed; and to crown it all, not even a tracing of any part of the work was preserved in the office. The great hurry to get out the work prevented as from making tracings, therefore I gave the contractors the original drawings.

"Drawings are the exclusive property of the Architect, and persons using them are held responsible for their return in good order when desired."

Now the point is this: The contractors assert I should reproduce the work, at my expense, or that the proprietor should pay me for making them; that the proprietor should furnish them with all necessary drawings. The proprietor asserts that he furnished them drawings once, and they were responsible for them.

The building is under roof, and we have been compelled to board the front up on account of the inclement weather and the delay of the contractor to finish his work.

I am respectfully,

S. M. HOWARD.

[We have never met with any mention of a case similar to that of our correspondent, and doubt if a reference can be cited which will meet the particular point. As to the general question, however, we see no way in which the contractor can avoid his obligation to pay for replacing the drawings destroyed while under the charge of the architect. If the drawings were not returned to the proprietor, the contractor was responsible for their preservation; and if to the contractor, he cannot compel any one else to make good his loss; and if to the architect, according to the demand stamped on the drawings, he is bound to make good the loss.]

See also under "Legal Notes," page 20.—EDS. AMERICAN ARCHITECT.]

THE following circular to the members of the Boston Society of Architects has just been issued:—

SECRETARY'S OFFICE, 60 DEVONSHIRE ST.
BOSTON, Dec. 18, 1880.

Dear Sir,— Agreeably to the requirement contained in Art. XXIII, of the By-Laws of this Society, that twenty days' notice shall be given to each member of any proposed amendment to said By-Laws, I have the honor to state that at the next regular meeting of the Society the following amendment will be presented for consideration and action :—

ART. XIII, to be so amended as to read:
 "The annual contribution of the Society shall be, for Fellows, twelve dollars; payable in two equal installments, one each on the first day of January and of July. The initiation fee for Fellows shall be ten dollars, except as hereinbefore provided, and for Associates, five dollars; payable within three months of the day of election. In all cases where the first of January or the first of July falls within these three months, the initiation fee shall be regarded as taking the place of the first of the above installments due after elections."

HENRY VAN BRUNT, *Secretary.*

OLD GRANITE WORK.—It is said that the first granite used in this country for constructing a building was employed in the erection of King's Chapel in Boston, in 1752, and was quarried in Braintree.

THE NEW STATUE OF WASHINGTON FOR NEW YORK.—The President has approved the bill granting permission to the New York Chamber of Commerce, to erect a statue of George Washington in front of the Sub-Treasury building in that city.

A NEW COLLEGE OF ARCHÆOLOGY.—Papers were filed at Albany, N. Y., on December 30, incorporating the College of Archæology and Æsthetics of New York, naming as directors Amos K. Hadley, J. W. H. Carroll, and others. The institution is to furnish free, or nearly free, instruction.

LAND RECLAMATION IN HOLLAND.—Since the beginning of the sixteenth century, more than 800,000 acres have been won from the water in Holland, and reclamation still goes on at the rate of about eight acres a day. Since 1850, the Lake of Haarlem has been converted into a region of farms and villages; and the pumping out of the Zuyder Zee, now to be done, will surpass in magnitude all previous endeavors.

THE PARIS FIRE DEPARTMENT.—The commander of the Paris fire-brigade, Colonel Paris, has published a book, called *Le Feu à Paris et en Amérique*, in which he compares the resources of the great towns of America and of the great towns of France, for combating the ravages of fire. Colonel Paris naturally comes to the conclusion that the French *personnel* is superior, but the material manifestly inferior. At Paris, there are rarely personal accidents in fires, thanks to the excellent gymnastic education and to the devotion of the firemen. The regiment of the *sapeurs pompiers* of Paris is constituted like the other corps of the French army. It is subjected to the discipline and exercises of the other infantry regiments, and like them it is under the control of the Minister of War. The firemen are taken from among the soldiers who have performed extra or meritorious service in the army. Their military instruction is almost finished, and all that remains to do is to form them professionally. This training is very severe, and a fireman must be very strongly constituted in order to bear it, as well as to bear the fatigue of his service. Hand pumps are still in use in Paris. Each pump weighs 565 kilogrammes, and is drawn by three men at a run; one of the men also carries the apparatus for combating fires in cellars, weighing 221 kilogrammes. Paris possesses only four steam fire-engines, two of which do not work well. The horses to draw them have to be borrowed from the omnibus company. On paper the effective of the force is 1,690 men and 50 officers. In reality there are never more than 1,450 men in the corps. The ordinary fireman is paid 1fr. 05c. a day, and an active corporal 1fr. 75c. Paris possesses 1,200 hand pumps, and 1,000 steam fire-engines. The Paris fire-brigade is very useful. The stations of the fire-brigade are likewise not sufficiently numerous. In the outlying quarters, especially where workshops abound, the fire would have its own way before the engines could come up. At Paris there are no alarm stations; in New York there are 925. At Paris the fire-brigade has at its disposal only 231 kilometres of telegraph wires, and curiously enough, no one of the theatres is in communication with the engine stations. At Paris there is not enough water, the artificial and natural reservoirs holding only 1,033,548 cubic metres; at New York they hold 33,872,180 cubic metres. At present, Paris has only 321 fire plugs; Colonel Paris estimates that 4,200 are necessary. The cost of the New York fire-brigade is 6,275,850fr.; that of the Paris brigade for 1879, was 4,853,000fr. Needless to say, the Paris fire-brigade is not so well equipped as the New York one. Need we dwell upon the painful and ridiculous sight of the brave Parisian firemen struggling against a fire, with a few barrels of water and hose-pipes that barely carry above the second story? If the book of Colonel Paris leads to any reform, say within the next five years, it will be at once a great advantage for Paris, and a remarkable phenomenon in the annals of French administration.—*Parisian*, November 11.

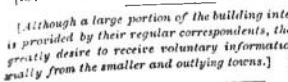
THE HEALTH OF CITIES.—Statistics compiled by the National Board of Health show that for the year ending October 31, 1880, the more important cities of the world rank as follows in comparative healthfulness. The death rate shows the number of deaths to each 1,000 persons during the year:

City.	Population.	Death rate.
Chicago.	503,238.	17.9.
Philadelphia.	850,000.	15.3.
St. Louis.	335,677.	16.6.
Boston.	355,000.	20.
Baltimore.	363,796.	20.9.
London.	3,251,359.	21.
London.	1,019,417.	21.8.
Glasgow.	629,508.	21.9.
New York.	1,293,223.	23.4.
Paris.	1,988,806.	23.5.
London.	1,019,417.	23.8.
New Orleans.	216,309.	27.7.
Lyons.	342,815.	27.7.
London.	1,019,417.	28.3.
Dublin.	314,666.	32.9.

OTHER CAUSES OF FIRES.—People still adhere to that old and evil habit of putting kindling-wood under stoves to dry. An amusing but almost serious result of this is told as happening in an Indiana school-house. On the door of this school-house being opened the other morning, the stove, which had been left with fire in it on the previous night, was nowhere to be seen, and all that was left to mark the space it had once occupied was a charred hole in the floor. It appeared that some wood placed under the stove the night before had taken fire, and that the stove had been so heated that it had fallen through into the cellar underneath. Fortunately the fire had gone out, and no further harm was done.

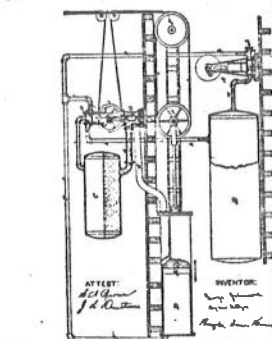
The Fireman's Insurance Company, of Dayton, recently paid a loss at Wakarusa, O., which originated somewhat peculiarly. The stock was millinery, and in the show-window the owner had set up a kerosene lamp and a tin reflector. Among the goods was a small belt of silk lace trimming, and upon this the reflected rays from the lamp focused to such an extent as almost to entirely consume the silk. The fire was discovered and put out, and, with the exception of a small smoke damage, no other article was injured. The query is, if this was this case, could not a small quantity of black silk lace, or could a tin reflector to a kerosene lamp so intensify the rays of light as to cause combustion of an article several feet from it? The sequel to this, if known, might satisfactorily account for some of the mysterious fires in millinery shops. — *The Spectator*.

A NEW ILLUMINATING OIL.—Should the experiments of a Frenchman at Bordeaux, France, in the manufacture of grape oil, prove successful, an additional burning oil may be supplied in Canada. This fluid is made from the seeds of the fruit, is sweeter than the nut oil, remains fluid at a lower temperature, and when burned in lamps gives a bright, smokeless, and odorless flame. An oil possessed of these virtues, if cheap, might acceptably take the place of coal oil. Probably, when fruit preserving becomes more generally an established industry, the refuse of the process, which is now sold as fuel, will be as well as that resulting from the making of wine, will be turned to good account by its transformation into burning oil. —*Hamilton (Ont.) Times.*



BUILDING PATENTS.

[Printed specifications of any patents here mentioned together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, D. C., for twenty-five cents.]

[illegible]

independently from the car; but it is best to tie them together and operate them through a valve. The operation is as follows: The car is up to the landing and about half-way up, the piston in the cylinder *A* is forced down into the water, so that the reservoir, *B*, is open to the *C*, through the pipes *b*, *c*, and the water in the cylinder *A* and the water may be forced down into the cylinder *C* through the pipes *b*, *c*, into the *D*, as shown. The air end of the cylinder is forced from the compressor, but is cut off from the car by the valve, *G*, and the air is suction from *D* through the pipe, *g*, the compressor, which, in turn, forces it into the reservoir, *B*. The car has ascended far enough, the valve, *G*, is closed, and the air in the cylinder and wheel, *J*, thus cutting off communication with the cylinder, *D*, and the reservoir, *C*, and is forcing off *B* from the car. The air in the cylinder, *D*, thus continuing the rotation of the wheel, *J*, it forces open the water-valve, *G*, and the air is forced through the pipe, *g*, to connect the air to the descending car thus forces the water to rise, and the air from the latter passes through the valve, *G*, and the pipe *g*, into the cylinder, *D*, thus more forcibly increasing the pressure on the engine piston. Ordinarily the water-valve, *G*, as the same water will be used over and over in the apparatus, the water in the air inlet, *A*, of the compressor is furnished with automatic valve, *E*, arranged to admit of the water being used to supply a deficiency. It is taken into the cylinder, *A*, and is forced into the load lifted and forced into the engine, but as the compressor will not usually be used, the water is drawn from the vessel, *C*, with sufficient force to force the water into the cylinder, *A*, as the car descends, the displaced air (which would be compressed and act to retard the descent) is forced out of the cylinder, *A*, by allowing it to pass into the air end of the cylinder, *D*.

MENT.—The commander of the Paris fire-
published a book, called *Le Feu à Paris* et en-
mures the resources of the great towns of
owns of France, for combating the ravages
ally comes to the conclusion that the French
material manifestly inferior. At Paris,
idents in fires, thanks to the excellent gym-
devotion of the firemen. The regiment of
is constituted like the other corps of the
el to the discipline and exercises of the
like them it is under the control of the
en are taken from among the soldiers who
months' service in camp. Their military
their military instruction is almost finished,
to form them professionally. This train-
ment must be very strongly constituted in
to bear the fatigue of his service. Hand
is. Each pump weighs 665 kilogrammes,
in a run; one of the men also carries the
in cellars, weighing 221 kilogrammes.
am fire-engines, two of which do not work
can have to be borrowed from the omnibus
active of the force is 1,600 men and 50 off-
power more than 1,450 men in the corps.
1 fr. 04c. a day, and the corporal 1 fr. 71c.
mises, which, when the fire is of any mag-
the stations of the fire-brigade are likewise
in the outlying quarters, especially where
would have its own way before the engines
here are no alarm stations; in New York
fire-brigade has at its disposal only 231
men, and curiously enough, no one of the
with the engine stations. At Paris there
artificial and natural reservoirs holding only
New York they hold 33,872,180 cubic metres.
21 fire plugs; Colonel Paris estimates that
of the New York fire-brigade is 6,273;
brade for 1879, was 1,583,110 fr. 10c.; is it
parison further? Need we dwell upon the
of the brave Parisian firemen struggling
arrels of water and hose-pipes that barely
y. If the book of Colonel Paris leads to
next five years, it will be at once a great
remarkable phenomenon in the annals of
Paris, November 11.

—Statistics compiled by the National Board
of Health, for October 31, 1880, the more
rank as follows in comparative healthful-
ness the number of deaths to each 1,000 persons

Population.	Death rate.
369,298	17.9
330,896	18.3
333,571	18.8
335,000	20
393,796	20.9
324,299	21
318,921	21.8
384,508	21.9
1,293,223	23.4
1,088,806	23.4
365,889	23.8
216,339	27.1
342,816	27.1
1,096,041	27.3
314,066	28.3

—People still adhere to that old and evil
habit of under stoves to dry. An amusing bit
is told as happening in an Indiana school-
house where firemen had opened the other morn-
ing left with fire in it on the previous night,
that that was left to mark the space it had
a hole in the floor. It appeared that some
the night before it had taken fire, and the
stove fell through into a deep cellar
where fire had gone out, and no further harm was
done.

—Company, of Dayton, recently paid a loss
amounting somewhat peculiarly. The stock
owner-window the owner had set up a kerchief
among the goods was a small belt of silk lace
as reflected rays from the lamp focussed to
entirely consume the silk. The fire was dis-
tinctly the exception of a small smoke damage,
red. The query is after all, was this a case
in black silk lace, or could a tin reflector to
the rays of light as to cause combustion of
it? The sequel to this, if known, might
one of the mysterious fires in millinery shops.

—Should the experiments of a French-
the manufacture of grape oil, prove success-
ful may be supplied in Canada. This fluid is
a fruit, is sweeter than the nut oil, remains
and when burned in lamps gives a bright,
me. An oil possessed of these virtues, if
like the place of coal oil. Probably, when
one of an established industry, the refuse in
city, as well as that resulting from the mak-
ing of good account by its transformation into
oil.

BUILDING INTELLIGENCE.

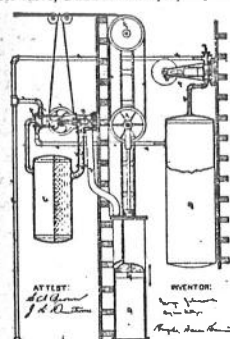
(Reported for The American Architect and Building News.)

Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.

BUILDING PATENTS.

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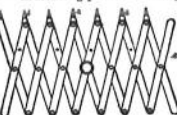
234,814. HYDRO-PNEUMATIC ELEVATOR. — George Johnson, Cincinnati. This invention relates to that class of elevators by which the load is lifted by compressed air operating through the medium of a liquid column, which acts upon a hydraulic piston. The object of the invention is, in the main, to permit the air in the air and water vessel to flow into the hydraulic cylinder back of the piston when displaced by the water from the cylinder while the car is descending, and thus avoid such back-pressure as will occur if the air-compressor does not remove the air fast enough. It is thus possible to avoid the employment of a contingent exhaust-valve operated from the car, and to utilize all of the exhaust instead of escaping a portion of it into the atmosphere. A is a suitable air-compressor driven by steam; B is a compressed-air reservoir, connected with the compressor by a pipe, a; C, a reservoir to contain both compressed air and water, the former being supplied to it from the reservoir, B, through air-pipes, b and c; and D, a hydraulic cylinder, supplied with water from the reservoir, C, through pipes, d e. The piston, E, which plays in the cylinder, is connected, through its rod, with a set of shaves, F, which serve to communicate motion to the car (not shown in the drawing) in the usual manner. The passage of water through the pipe, d, is controlled by a valve, G, and the passage of air from the reservoir, B to C, is controlled by a two-way valve, H, arranged between the pipes, b and c, being connected with the pipes b c, and with an outlet pipe, f. Both ends of the cylinder, D, are closed, and the end to the left, or the "air end," is connected by a pipe, g, with the suction or inlet, A, of the compressor, A. This pipe, g, is also tapped by the pipe, f, so that the compressor is at times connected with the reservoir, C. The water-valve, G, and air-valve, H, may be operated



independently from the car; but it is best to connect them together and operate them through one rope, i. The operation is as follows: The car is supposed to be ascending and about half-way up, the piston, E, moving in the direction of the arrow. The air-valve, H, is so set that the reservoir, B, is open to the reservoir, C, through the pipes b c, and the water-valve, G, is open, so that the water may be forced by the compressed air in C through the pipe, d, into the cylinder, D, as shown. The air end of the cylinder, D, is open to the suction of the compressor, but is cut off from the reservoir, C. Thus in the ascent of the car the air is forced from D through the pipe, g, to the compressor, which, in turn, forces it into the reservoir, B. When the car has ascended far enough the water-valve, G, is closed through the medium of the rope, i, and wheel, j, thus cutting off communication between the cylinder, D, and the reservoir, C, and stopping the car. At the same time the air-valve, H, is closed, cutting off B from C. The car is caused to descend by continuing the rotation of the wheel, j, far enough to throw open the water-valve, G, and the other part of the air-valve, so as to connect the air-space in C, through the pipes, b c, with the outlet, f, and pipe, g. The descending car thus forces the water from D into C, and the air from the latter passes through the pipe, g, and the air inlet, A, of the compressor is furnished with pressure on the engine piston. Ordinarily the same air as well as the same water will be used over and over in this apparatus; but to provide against leakage of the air inlet, A, of the compressor is furnished with an automatic valve, k, arranged to admit air, should any be required to supply a deficiency. In this way air is taken into the compressor at a tension corresponding to the load lifted and forced into the reservoir, B; but as the compressor will not usually be able to raise the air from the vessel, C, with sufficient rapidity as the car descends and force the water back into said vessel, the displaced air (which would otherwise be compressed and act to retard the descent of the car), is provided for by allowing it to pass over into the air end of the hydraulic cylinder. From thence it

will be removed by the compressor as the car ascends. By connecting the air-space in the reservoir, C, with the air end of the cylinder, D, it is possible to lower the car and force the water from the cylinder into the reservoir, whether the compressor is working or not, as the displaced air in the reservoir flows into the cylinder. Where one compressor and air reservoir are employed to operate two or more elevators the arrangement will be substantially as herein represented, except that check-valves should be placed in the pipes that are common to both or all of the elevators, to prevent them from interfering with one another.

235,225. SPACING AND DIVIDING INSTRUMENT. — Albert K. Fulton, Baltimore, Md. This invention relates to an instrument adapted to dividing lines or spaces between points into a number of parts of equal length, and it consists in providing the well-known extensible device used in toys and for a variety of purposes, with indicating-points at the joints of the



diagonal strips, which points, as the device is extended or compressed, remain at equal distances apart. Supposing it is desired to divide a line into six equal parts, it is only necessary to place the point marked 6 at one end, and the point marked 6 at the other end of the line. The indicating-points will then indicate where the spacing-marks should be made.

235,446. STEAM-PIPE COVERING. — Edward H. Ashcroft, Lynn, Mass.

235,567. BRICK KILN. — George D. Dudley and Stanley Mansfield, Lowell, Mass.

235,883. UNDERGROUND TELEGRAPH LINE. — Edward A. Kitzmiller, Wilkins Township, Pa.

235,885. WATER-FILTER. — Ewald Over, Indianapolis, Ind.

235,894. SECTIONAL STEAM-PACKING. — George C. Phillips, Silver City, Nev.

235,967. BRICK KILN. — Carl Schlimp, Vienna, and Rudolf Howitz, Schattau, Austria.

235,910. METHOD AND APPARATUS FOR REMOVING SEWAGE. — Isaac Shone, Wrentham, No. Wales.

235,957. HINGE FOR AWKING-BLINDS. — E. Barlow Brown, Boston, Mass.

235,945. HOT-AIR FURNACE. — Lyman Gould, Norwich, Conn.

235,947. ELECTRICAL ROCK-DRILL. — Alfred G. Holcombe, Granby, Conn., and Charles A. Cheever, New York, N. Y.

235,949. ELECTRICAL ROCK-DRILL. — Alfred G. Holcombe, Granby, Conn., and Charles A. Cheever, New York, N. Y.

235,955. MEANS OF SINKING TUBES AND RUNNING TUNNELS AND DRIFTS BY PNEUMATIC PRESSURE. — Harvey R. Leonard, San Francisco, Cal.

235,956. WATER-ELEVATORS. — William D. Mayfield, Fort Worth, Texas.

235,967. FIRE-TONGS. — James O. Morse, Englewood, N. J.

235,964. CLOTHES-LINE FASTENING. — Everett A. Rice, New York, N. Y.

235,967. METHOD OF RELIEVING RIVER CHANNELS OF SEDIMENT AND FORMING LEVEES. — Newton Sewell, Marysville, Cal.

235,928. WINDOW-CORNICHE. — Jonas Hertmann, Columbus, Ohio.

235,944. FIRE-ESCAPE LADDER. — Earnest J. Krause, Carlisle, Pa.

235,969. TREASONING MACHINE. — Horace Molby, Davidsburg, Mich.

235,965. PRESERVED WOOD. — Hermann J. Müller, San Francisco, Cal.

235,966. ART OF BURNING DRAIN-PIPE. — John Murtagh, Boston, Mass.

235,975. GAUGE FOR SAWING IRREGULAR CURVES. — A. S. Parks and Amos S. Streeter, Winchendon, Mass.

235,983. MANUFACTURE OF ARTIFICIAL SLATE. — Heinrich Reinhold, Hamburg, Germany.

235,106. SOLDERING-IRON. — Valentin Storch, Knoxville, Tenn.

235,114. WRENCH. — James M. Totten, Sharon, Wis.

235,124. STRAP-HINGE. — Benjamin D. Washburn, Boston, Mass.

235,125. SINKER-TRAP. — Eleuctus B. Ward, Detroit, Mich.

235,132. CLAY-PRESS. — John F. Wilcox, Alleghany, Pa., and Edward M. Pearson, Wheeling, W. Va.

SUMMARY OF THE WEEK.

Boston.

BUILDING PERMITS. — Brick, — Beacon St., rear of 347, for John H. Dix, stable, 15' x 20'.
Wood, — Virginia St., cor. Davenport St., for J. H. Besarick, stable, 18' x 28'.
Y. M. C. A. BUILDING. — The Herald says that the Young Men's Christian Association of this city is again moving in the matter of securing a new building. The association has recently received a gift from Mrs. Stone, of Malden, of \$25,000 toward a building fund; and it is thought that the building now owned by the association, on which there is a mortgage of \$10,000, can be sold for \$100,000. Recently, it is reported, a meeting of a few prominent friends of the association, Vinet & Dodge, masons, and Bourn & Leavitt, carpenters.
Mr. W. W. Lewis is the architect of a house for Mr. Geo. B. King, cor. Fairfield St. and Commonwealth Ave., costing about \$40,000.

Brooklyn.

BUILDING PERMITS. — Manhattan Ave., s e cor. Calver St., one-story frame store, 23' x 60'; cost, \$3,000; owner, Isaac Vananburgh.
Payette St., w s, 250' n Broadway, three-story frame tenement, 37' 9" x 60', th roof; cost, \$6,500; owner, Mrs. Weber, cor. Broadway and Payette St.; architect, A. Herbert; builder, V. Bruckhauser.

Chicago.

BUILDING PERMITS. — H. J. Storme, 2 two-story brick dwell., 41' x 44', Fulton and Maplewood Sts.; cost, \$2,000.
Roger Plant, 2 five-story brick stores, 40' x 85', Monroe St. and Fifth Ave.; cost, \$25,000.
CHAMBER OF COMMERCE. — A ballot lately taken by the Board of Trade on the proposition of the Board of Commerce to move the Chamber of Commerce into a new building, to be erected on vacant lots just south of the Grand Pacific Hotel, resulted in an overwhelming majority in favor of the proposition. It is very probable that immediate steps will be taken looking toward the construction of the building and to the settlement of some legal difficulties said to be in the way; but the new building will not probably be ready for occupancy for nearly two years.

Indianapolis.

ALTERATIONS. — An addition is being made to Smith's brewery, which will cost \$40,000; Messrs. Huebner & Mueller, architects.
Brewery Hall is being remodelled at a cost of \$30,000.
Mr. W. L. B. Jenney, of Chicago, architect.
STORES. — Mr. C. A. Wallingford is the architect of a four-story brick block for Shaw, Backus & Co., which will cost \$10,000.
Mr. E. H. Ketcham, architect, is building for Oscar Board a store which will cost \$4,000.
Mr. R. P. Daggett, architect, is building a four-story brick and stone store for Stewart & Barry; cost, \$10,000; also a factory, which will cost \$3,000.
HOUSES. — Mr. C. A. Wallingford, architect, is building a house for C. Coffa, which will cost \$6,000, and four frame houses for J. Huebner, which will cost \$7,000.

New York.

BUILDING PROSPECTS FOR 1881 look very bright, and there are a large number of important buildings already in architects' hands. Up-town there will be extensive building operations and more enterprise on the part of individual real estate owners than of late years. The houses built during the past year in the upper sections of the city have been generally built by speculative builders, and have found a ready sale; but they have not been of the substantial character we anticipate will be the prominent feature of the buildings to be erected during the coming year.

ELABORATE HUNDRED AND EIGHTY. — Applications for building permits for the year just ended exceed those of the previous year by 105 plans, while the plans for alterations and repairs to buildings for 1880 fall short of those of 1879 by 7 applications. Owing to the lack of clerical help in the Bureau of Building, there has not yet been made the customary recapitulation of business done during the year, and no present prospects can be found of there being one made.

BUILDING PERMITS. — Broadway, Nos. 569, 571, 573 and 575, and Nos. 85, 87, 89 and 91 Prince St., being 7 s e Broadway, e s of Mercer St. and n s Prince St., 2 six-story brick stores on Broadway, each 50' x 200' to Mercer St.; cost, total, \$350,000; owner, John J. Astor, 85 Prince St.; architect, Thomas Stent; builders, James Webb & Sons and John Downey.
Washington St., No. 61, five-story brick store building, 23' 4" and 26' x 73' 10"; cost, \$11,000; owner and builder, Joseph Naylor, 20 Courtland St.; architect, William Grant.

College Ave., e s, 100' n One Hundred and Forty-Fifth St., 2 three-story brick dwell., 14' x 43'; cost, each \$1,200; owner, Charles Fossing, 2195 Third Ave.; architect, J. B. Franklin.

Lincoln Ave., e s, 100' n of Harlem River and One Hundred and Thirty-Second St., one-story frame ice-house, 28' x 100' 9"; cost, \$2,000; owners, L. & J. H. & R. R. Co.; architect, E. M. Reed.

Sixty-Fifth St., s s, 95' w Madison Ave., four-story brown stone dwell., 23' x 60', extension 20' x 30' 6"; cost, \$30,000; owner, William Gusow, 224 and 226 East Forty-Second St.; architect, James E. Ware.

ALTERATIONS. — Eleventh Ave., e s, 50' s Twenty-Seventh St., forty feet of centre section of building raised about 16'; cost, \$2,500; owners, L. & J. Colwell, West Twenty-Seventh St., N. Y.; architect, A. H. Leake; builder, M. Reed.
Fifty-Ninth St., No. 218 w, raised to six stories at rear; cost, \$1,600; owner, Charles E. Appleby, 135 Broadway; architect, Wm. Howe; builder, M. McDermott.

Forty-Ninth St., No. 39 w, four-story brick extension, 17' 2" x 29'; cost, \$5,000; owner, Emily M. Plummer, 39 West Forty-Ninth St.; architect and builder, G. H. Graham.

Grand St., e s cor. Crosby St., general repairs; cost, \$3,500; owner, John H. Gerdes, Canal St., n e cor. Elm St.; architect, F. E. Graf.

One Hundred and Forty-Ninth St., s s, 25' w Cypress Ave., two-story frame and brick extensions, 12' x 18'; cost, \$1,500; owner and builder, Geo. C. Glacius, Cypress Ave., opposite One Hundred and Forty-Eighth St.

San Francisco.

BUILDING PERMITS. — New building and additions to the Standard Shirt Factory, on corner of Grove and Gough Sts.; owners, Neustadter Bros.; cost, about \$11,000.
Two-story and basement dwell., on corner of Webster and Sacramento Sts.; owner, C. Wilkins; cost, \$5,000.
Two-story and basement dwell., on Geary St., between Webster and Fillmore Sts.; owner, George Law; cost, about \$5,000.
Twelve houses, two-story, on Hoff Ave., between Sixteenth and Seventeenth Sts.; owner, Carroll Cook; cost, \$18,000.

(Continued on next page.)

ENTERTAINMENTS.—Much has been said, and not without good reason, of the first city in the world to hold such banquets is traditional, as a fact, and perhaps to precedents as of luxurious entertainments in the case of the late Mr. J. B. B. relative to a recent banquet and ball given for the benefit of those who in various ways in which the rate of a few of the items:—

.....	£10	0	0
.....	6,098	0	0
.....	1,731	0	0
.....	124	15	0
.....	81	10	7
.....	559	0	0
.....	314	17	2
.....	65	12	0
.....	235	0	0
.....	214	0	0
.....	27	0	0
.....	67	0	0
.....	117	0	0
.....	145	0	0
.....	16	16	0
.....	300	0	0
.....	549	18	0

spent on this little entertainment the above items are sufficient to item in the civic expenditure wise enough to spend £11,000 in regard, argument against its excess as it has hitherto proved futile.

annual address, Governor Cornell of building has, under the liberal hand marked progress during the made by the Commissioners to the Senate and Executive Department of the Legislature, as required by the full realization of this plan, however, well advanced, and will be fully completed within a few months of the Commissioners for

.....	of previous	
.....	\$73,100.62	
.....	100,000.00	
.....	1,600,000.00	
.....	\$1,673,100.62	
.....	1,251,980.02	

point will be required to pay balances when completed, and other defects was recently discovered by Chamber. A large stone in to have been fractured and con- thorough investigation, the super- satisfactory explanation of the removed, and it is hoped that no well, however, for the Legis- safety of that portion of the

ES FOR FOUR YEARS.—The fol- months for the past four years, ending December, 1880, whose re- mitted), is copied from the fire

1870.	1878.	1877.
1,124,990	\$5,667,100	\$5,303,100
1,189,649	5,428,900	4,747,000
7,755,240	7,468,100	7,091,800
2,188,649	5,287,900	5,556,100
2,985,140	6,025,300	7,566,500
2,929,140	4,241,400	28,253,100
2,111,200	5,683,800	7,577,000
1,164,340	5,690,000	5,369,400
2,914,140	4,250,800	4,157,100
7,455,800	6,971,400	6,455,700
6,819,200	6,313,100	7,216,000
1,132,800	6,553,100	5,129,800
1,132,800	\$70,200,400	\$97,556,800

paper says that Fire Marshal that occurred last month at the 313 to 323 East Twenty-second street. He has addressed a com- mander upon the subject, and on the fourth floor, which was rising. For the oiling and polish- ing of the day was supposed to be as, and there consumed. But on and that it was sometimes left in used; that he had on occasions upon the floor, and once spread. Thus declared another source also show that though the regula- all the elements of care, when of an irresponsible boy, they are

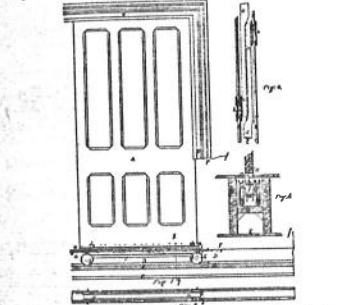
BUILDING INTELLIGENCE.

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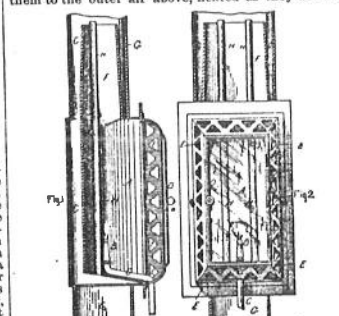
235,067. SLIDING DOOR.—(No model).—David K. Miller, Knoxville, (Hillsburg P. O.) Tenn. This invention consists in a carriage having a rail above the door on which the door is secured, and a rail parallel with the first below the floor, to which the wheels are secured, so as to run on a track below the floor, the upper and lower rails of the carriage-frame being connected at one end only by a box or cross-bar, which passes through a slot or opening in the floor, which slot lies wholly within the doorway without tracks or smooth floor through the pocket, thus affording a of a bottom mounting. A represents a sliding door, and is the casing. The floor is shown at C, the joist at D, and ceiling at E. The door, A, is mounted and operated as follows: A frame, A', is formed by bending a bar of metal into U form. For this purpose a T-bar is best, and bent with the web outward, as



shown, the web, C', of the lower bar, A', projecting downward, and the web, C, of the upper bar, A', projecting upward. Such form of bar combines strength, stiffness, and lightness, while the web, C, furnishes convenient means of attachment. This frame is arranged, as in Fig. 1, with one arm, A', a little above and parallel with the floor, and the other arm, A', below the floor and between the joists, D, Fig. 3. The connecting bar, or U, C, of the frame, passes through a slot, E', cut in the floor in line with the door, but a little off, and in the pocket, F, between the walls. It is thus entirely covered and out of sight. The length of this slot is, of course, equal to the distance which it is desired to slide the door. The space between the lower flat face of arm A' and the upper surface of the floor may be varied as desired, but in any case it is best to adjust it so as to run clear of carpets, thresholds, or other finishing. In fastening the door, A, to this upper bar, A', a groove is plowed in the bottom edge of the door for receiving the web, C, as in Fig. 3. Bolts may then be passed through the door and web, as in Fig. 1; or screws may be passed through the flange or flat face of the bar into the edge of the door. The under bar, A', of the frame is supported on rollers, B, which may be journaled directly to the under web, C', or to brackets, B', which are riveted to and extend a little way down from the web. The purpose of this is to permit of the use of larger wheels than would otherwise be practicable. It is best to use four wheels, B, and arrange them on opposite sides of the bar, as in Fig. 2. Two or three may be used, however, the usual rabbeted guide in the upper door-casing serving to keep the door in proper position. In ordinary cases it is best to extend the frame, A', of the door-carriage about the width of the door, though either bar, A' or A', may be made longer or shorter, if preferred. In the case of wide and heavy doors the lower bar, A', and its track are made longer than the width of the door to insure smooth and easy movement; and in case of double doors the front extension of bars A' may be bent a little to one side, and the adjacent flanges along the lapping parts of the bars may be sheared off, as at F, Fig. 1. In such case, where the extended ends of the bars lap, it is well to use but one wheel at the front end of each bar and journal it on the outside of the bar, as also shown in Fig. 4. When it is desired to increase the strength or stiffness of the truck frame, A', without material increase in its height, it may be done by using T-bars having a comparatively deeper web, C'. The invention is not limited to the particular form of frame, A', or arrangement of wheels or rollers shown, but include frames having bars above and below the door, connected at one end only through an opening in the pocket, and having tracks arranged below the floor, on which the frame moves. While the device has been described as carrying the door from below, yet substantially the same device may be employed and arranged in a similar manner for hanging the door from above.

235,117. VENTILATING APPARATUS.—James H. DeLand, Malden, Mass. This invention relates more particularly to the water-closet. It consists of the arrangement, within the room to be ventilated, of a chambered box, heated by gas, and also constructed for the air of the room to pass into it, and being heated, thence to pass upward and out of the building at any desired point, in combination with independent flues, which at their lower ends open directly to the effluvia and vapors arising from the water-closet in a manner to receive them and conduct them to the outer air above, heated as they will be, coming by contact with the heated walls of the inner chamber through which the common air of the room passes, before they can escape into the room. A is a gas-chambered box, and B a gas-burner. Rare openings in the sides of the box, A, for the air of the room to pass into the chamber of the box, and of the room to be heated; F is a passage leading from the upper end of the gas-chamber, A, and from thence, running upward, it opens into passage, G. This passage, G, is at the back and sides of the gas-chamber, and one of its walls makes the back and side walls of the gas-burner chamber, A. This passage, G, below the gas-chamber, is in communication with the water-closet which it is desired to ventilate, and is so arranged as to secure the entrance of the effluvia and vapors from the water-closet into such passage before they can escape into the room, and above the gas-chamber, A, and the passage, F, it runs to the outside of the building at any desired point. H H are flues passing upward through the gas-chamber and passage, F, and opening at their lower ends into the back passage, G, below the gas-chamber, and at their upper ends into the passage, G, above the passage, F.

235,137. AUTOMATIC ELEVATOR GATE.—George Ackermann, Cincinnati, Ohio.



235,141. HEATING AND VENTILATION.—Wm. F. Beecher, Cincinnati, Ohio.

235,151. AUTOMATIC VALVE TO CHECK WASTE WATER.—Elliott C. Fursey, St. Louis, Mo.

235,163. SCROLL SAW.—William Jones, Portland, Ind.

235,184. PNEUMATIC BRAKE FOR ELEVATORS, ETC.—John H. J. Schmidt, Cincinnati, Ohio.

235,189. COMBINED LATCH AND LOCK.—Edward Snyder and Israel Adams, Worcester, Mass.

235,199. BLOWER FOR OPEN STOVES AND GRATES.—Geo. Wellhorne, Akron, Ohio.

235,215. LEAD PENCIL.—Thomas B. De Forest, Birmingham, Conn.

235,226. NET FOR FIRE-ESCAPE PURPOSES.—William L. Hunt, Port Hope, Canada.

235,229. COMBINED LOCK AND REVERSIBLE LATCH.—Edwin A. Kimball.

235,232. SPRING-KOLLER.—J. Christopher Lake, Philadelphia, Penn.

235,239. CLAMP.—Edward L. Morris, Boston, Mass.

235,247. HEATING APPARATUS.—Eugene F. Osborne, St. Paul, Minn.

235,252. REFLECTOR FOR SPIRIT LEVELS.—Walter W. Vaughn, Stockton, Cal.

235,307. FILTER.—James A. Crocker, Boston, Mass.

235,311. WATER TANK REGULATOR.—Patrick W. Doherty, Boston, Mass.

235,315. ALARM BOLT.—Adam Egolf, Royer's Ford, Penn.

235,319. APPARATUS FOR MOISTENING THE AIR.—James G. Garland, Bideford, Me.

235,329. DOOR CHECK.—Edwin V. Heaford, Covington, Ky.

235,348. FIRE-ESCAPE.—Samuel T. Mickey, Mt. Airy, N. C.

235,351. SASH COORD FASTENER.—Thomas Morton, New Windsor, N. Y.

235,355. PAINT MIXING MACHINE.—Wm. M. Shoemaker, Philadelphia, Penn.

235,370. FIRE-PLACE.—James G. Smith, Alliance, Ohio.

235,384. FIRE-PROOF BUILDING.—Joseph H. Walker, Worcester, Mass.

235,396. COMPOSITE ROOF.—Cyrus M. Warren, Brookline, Mass.

235,395. AIR-VALVE FOR STEAM RADIATORS.—Waterman D. Bristol, Springfield, Mass.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—The following building permits have been issued since the last report:—
Dr. John T. Montmouir, three-sty brick building on South Caroline St.
J. T. Loft, addition and improvements to dwell., on Gilmore St., between Harlan and Edmondson Aves.
Geo. Muller, addition and improvement to dwell., 48 South Broadway.
There were 1196 permits for the erection of new buildings issued for the year 1879, and the value of the houses is much more than in 1879, when it amounted to \$1,671,335.

Post-Office.—Mr. Hill, Supervising Architect, says the plans, specifications and estimates for the new Baltimore post-office will be ready this week.

GRAIN ELEVATOR.—The committee appointed at a recent meeting of the grain merchants of the Corn and Flour Exchange to secure a suitable location for an elevator for water-borne grain, have received about twenty offers of sites. The bids will be opened in a few days. They desire a lot 180' to 200' front and 200' deep.

STORES.—Mr. S. S. Clayton is about to erect two new stores, with dwellings above, on Gay St., near Ecker St., to be 38' x 100', four stories high, of pressed brick with stone trimmings; cost, \$10,000. Mr. Chas. L. Corson is the architect.

HOUSES.—Messrs. J. A. & W. T. Wilson have completed plans for a residence for Mr. F. M. Colston, to be built on the west side of St. Paul St., near Chase St. It is to be 24' wide and 78' 6" deep. The front is of pressed brick, with all openings emphasized by a free use of New Brunswick red sandstone. The roof is of red tile, and contains a large window of five lights, crowned by a pediment elaborately carved in wood. The interior is largely finished in cherry. Geo. A. Blake, builder.

Boston.

BUILDING PERMITS.—During the year 1880, 803 permits were issued from City Hall. 494 of these were for wooden and 309 for brick buildings. Only one permit has been issued so far this year.

BUILDING IN DECEMBER.—There were issued at the City Hall, in December, permits for 20 wooden and 6 brick buildings. The wooden included 3 dwellings, 3 manufacturing structures, and a grain elevator. The latter, for the Hoosac Tunnel Dock and Elevator Company, will be 75' x 325' in ground dimensions, and will be on Water St., Charleston. The brick structures include a residence, Commonwealth Ave., a warehouse for iron on Oliver St., near Purchase St., and a lumber dry-house on East Dedham St., near Albany St. There have been permits issued in 1879; 369 brick, against 203; and 2100 repairs, against 2350. The gain in brick more than compensates for the loss in wood and repairs, and the value of real estate improvements for the year will probably foot up nearly 25 per cent more than in 1879. There are only three or four lots left unimproved in the burnt district, but there is probability of further extensive mercantile building operations on South St., and in that section of the city, the coming season. Additional improvements on the Back Bay are also planned, and there is a prospect of considerable building of low and medium renting houses, in the outlying wards.—Commercial Bulletin.

Brooklyn.

BUILDING PERMITS.—Between Troy and Albany Aves., two-sty frame stable and car house, 110' x 214'; owners, Broadway R. R. Co., 21 Broadway; builder, P. Brady.

Cook St., Nos. 192 and 194, two-sty frame storage shed, 60' x 40'; gravel roof; owner, H. Shepherd; architect, T. Davies; builders, Iron Clad Manufacturing Co.

Gates Ave., n. s. 20' e Marcy Ave., three-sty brick store and dwell., 22' x 43'; owner, John Carberry, Cor. Gates and Marcy Aves.; architect, S. W. Osmon.

Park Ave., s. s. 56' w Broadway, two-sty frame dwell., 25' x 40'; cost, \$2,200; owner and builder, George Loring, 138 Floyd St.

Chicago.

BUILDING DURING 1880.—Building operations have been a little restricted, owing to the rise in prices of material after the yearly rental rates were fixed. However, the totals show more than last year. Up to last May there were houses and stores to let in every part of the city beyond the business centres, and in almost every building. The marked increase in demand which prevailed at the renting season, and has been since constantly growing, soon absorbed all the vacant room, so that now and ever since September there has been no adequate supply. Builders were taken by surprise, and immediately a number of large blocks were erected, the largest one being the Grilly & Blair improvement on West Madison and Halsted sts. The Madison St. front was completed in a remarkably short time, and both the stores and flats are all rented. The Halsted St. buildings are nearly finished, and tenants are waiting for them. This is only a sample of many of less importance. During the year the building permits numbered 4,000—about 33 per cent more than in 1879, and the frontage covered was 45,000 feet, over eight miles, and the cost stated at the office, which is generally one-fifth below actual expenditures, footed up between \$2,000,000 and \$10,000,000.—Real Estate and Building Journal.

Cincinnati.

REVIEW OF THE PAST MONTH.—During the month of December the following building permits have been issued:—

W. B. Smith, one-sty frame.....	\$ 3,000
T. T. Haydock, carriage factory.....	4,000
P. H. McCrory, 3 two-sty frames.....	5,500
Samuel C. Tatum & Co., four-sty brick.....	5,000
Levy Jones, two-sty brick.....	3,000
Pal Dorsey, two-sty brick.....	1,400
Nine permits for repairs.....	7,800

Total permits for the month, 16; total cost, \$41,700. For THE YEAR 1880 the total number of permits issued were 626, and the total cost was \$1,624,700. These figures are taken from the records kept by the Board of Public Works, but by no means do they represent the real amount of building done in this city during the past year. It would be safe to say that one-fourth should be added to the number of permits taken out, and 33 per cent to the cost of building, which would make the permits about 800, and the cost about \$2,160,000.

The year 1879 was figured on the same basis as is

(Continued on the next page.)

[Vol. IX.—No. 267.]

CLIPPINGS.

ment for Closing the Joints of Iron borings, 5 pounds; powdered oil; and water sufficient to moisten; but if time can be allowed, it must be used as soon as mixed,

blimated sulphur, 1 ounce; cast in a mortar and keep the powder with 20 times its weight of clean whole in a mortar; then wet it to consistency, when it is to be becomes as hard and strong as

Wash the metal with hot solution of nutgalls (hot) and bring

has tried everything, says that he has found nothing to equal the equal parts, soaked for ten hours being gradually to a boiling heat, becomes rosy, or appears like the surfaces to be joined, apply this

arts of finely powdered litharge one part of quicklime which has exposure to the air. This mixture without injuring. In using it, use oil; or, still better, in boiled linseed oil, as it soon hardens. In a pan over the fire, and pour a little on a cold stone you may be necessary to add a little piece of wood may be fastened to it, and when the work is finished, with the tool. Any traces of the by means of benzine.

recommended cement is made by parts of common pitch and one of oil until thoroughly incorporated, water. When cold, it is black, heat, and at 100 degrees Fah. is a paste, or in a liquid state, and being metal, glass, porcelain, ivory, and glaz windows. — *Scientific*

iron was not in commercial use. Darby, an intelligent mechanic, in to establish a brass foundry at it iron might be substituted for steel in effecting, being probably metal with which they were best named John Thomas had, some used by Abraham Darby into his distant relative. While looking at workmen, he said to Abraham that he missed it. He begged that Darby remained alone in the refractory metal and imperfect light appeared, but neither would owned they succeeded in casting into an agreement with Abraham. He was enticed by the offer, but he continued faithful; and was were confidential and much Abraham Darby. For more than in which Thomas and his master a mould of fine sand contained in process was practised and kept keyholes and barred doors. —

the largest linen-drapery establish- Champ de Mars, where land is which will serve as coach-house and wagons belonging to the firm. stables; the spirit of novelty and in the erection of a gigantic able in the artistic character and In height it will measure 20 feet, for will the design resemble that consist of a heralidic rampant, ie initial; and the design of this the most able heralidic engravers

ive. — A new use for photography been found in the discovery that ion or tampering in any way with the first proof of a well-known ily, it was observed that there self. No such blur was discernible lance. But the magnifying glass a restorer had been at work. He a skill that reproduced the color, ter, but he had not used the same tected by the subtle chemistry of

BUILDING INTELLIGENCE.

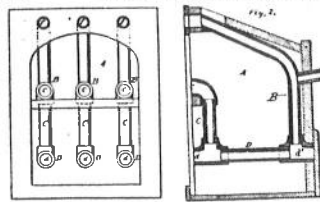
(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

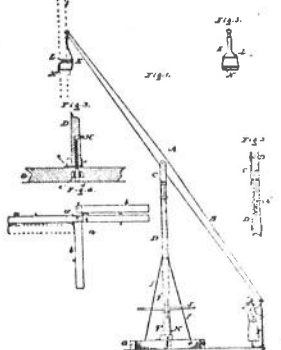
[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

236,370. FIREPLACE.—James G. Smith, Alliance, O. This invention relates to open stoves and fireplaces, and it consists in constructing the grate and hot-air flues of sectional tubes and couplings so that air entering them may be heated and discharged into the same or adjacent rooms, as may be desired. A designates the fire-place, and B B curved tubes rising from couplings *d'* at the rear of the hollow grate-bars D, and following the configuration of the back wall and top of the fireplace. These tubes have discharge-openings, *f*, at their upper ends, which may be controlled by dampers. E is a discharge-tube leading from each of the tubes, through the back wall, into an adjacent room. A coupling, *d*, is employed at the front end of each of the hollow grate-bars D, and



rising from it is a vertical hot-air flue, C, having at its upper end a curved flue or discharge, *e*. The coupling *d* is open at its outer end for the admission of cold air to the hollow grate-bar D. The tubes D and couplings *d'* and tubes C form the grate. The cold air enters at *d*, passes through the tubes D, B, and C, and is heated during its passage, and discharged into the same or the adjoining room. Dampers may be employed to control the discharge ends of the flues.

236,695. FIRE-ESCAPE.—Edward T. McKean, Philadelphia, Penn. Referring to the drawings, A represents a crane formed of an arm, B, which is pivoted to a vertical piece, C, having a stem, A', which is fitted in a socket at the upper end of the standard D, the arm B thus springing on the piece C, and the latter rotating on the standard. One end of the arm carries a swinging chair or basket, E, and the other end is connected to it a rope or chain, F, under the control of the fireman. G represents the base of the device, consisting of a piece, *a*, of tubular material, to the centre of whose sides are hinged pieces, b, which may be set out from *a* at a right angle, or folded parallel with it. In order to set up the crane the base G is



extended by opening out the pieces b. The standard D, in a horizontal position, has its foot placed at the centre of the base, the socket *e* serving as a guide and abutment. The standard is then raised, and when in an upright position the bolt *f* drops into the opening *d* and eyes *e* and prevents the folding of the base, after which guys *f*, extending from the top of the building, are fastened to the arms of the base. The crane may then be moved from place to place, the movement being facilitated by an arm, *j*, which is passed horizontally through the standard. By proper manipulation of the chain F the chair *e* may be elevated and projected into any window. The person to be rescued can then reach the chair. The arm is operated so as to swing the chair from the window, and clear of the building, and the lowering of the chair is readily accomplished (on the seat of the chair is formed a stop, *k*, which projects downwards from its front, the object of which is that when the chair is rested on the sill of window the stop abuts against the inner side of the sill and acts as a safeguard for preventing outward

movement of the chair while endeavors are being made to occupy it. In order to increase the height of the standard D other standards or pieces may be fitted to it by splicing.

236,699. APPARATUS FOR OBTAINING HEAT FROM GAS.—Augustus L. Allen and Geo. W. Harris, Poughkeepsie, N. Y.
236,878. SAW.—Charles H. Douglas, Chicago, Ill.
236,885. MINERAL PAINT.—Darwin E. Goodell, Germantown, Ohio.

236,890. TOOL-HANDLE.—Isaac W. Hoysinger, Philadelphia, Penn.
236,891. HEATER FOR CHURCHES.—James J. Johnston, Columbiana, Ohio.

236,893. LATCH.—Thomas Kirwan, Boston, Mass.
236,905. WATER-CLOSET.—Chas. H. Moore, Yonkers, N. Y.

236,910. DOOR-CHECK.—Francis V. Phillips, Chicago, Ill.
236,912. STOVE-PIPE THIMBLE AND COVER.—Moses B. Scribner, Boston, Mass.

236,913. STOVE-PIPE DAMPER.—William Scully, Detroit, Mich.
236,921. STOVE-PIPE FASTENER.—Albert Trollope, Detroit, Mich.

236,925. SAW-HANDLE.—James R. Woodrugh, Cincinnati, Ohio.
236,980. MACHINE FOR BENDING WOOD.—Edward L. Buckingham, Jefferson, Wis.

236,983. STOVE-PIPE DAMPER.—John K. Clark, Buffalo, N. Y.
236,985. BITUMINOUS CEMENT.—Edward J. De Smedt, Washington, D. C.

237,005. PENCIL.—Bradley A. Flske, Naperville, Ill.
237,014. TURRET, TURRET SKYLIGHT, ETC.—Geo. Hayes, New York, N. Y.

237,017. PAINT.—James F. Hoffman, Cincinnati, Ohio.
237,036. WATER-CLOSET.—Henry C. Meyer, New York, N. Y.

237,041. BENCH-CLAMP.—James Murphy, San Antonio, Tex.
237,049. SAW-SET.—Artemus Rush, Leon, Iowa.

237,056. TOOL-HANDLE.—Henry B. Sherwood, Westport, Conn.
237,060. WATER-ELEVATOR.—William A. Smith and R. P. Smith, Terrell, Tex.

237,063. SCREW-DRIVER.—Nelson Stow, Dinghamton, N. Y.
237,068. SEWER TRAP.—Henry Textor, Brooklyn, N. Y.

237,075. DUST AND WIND GUARD FOR WINDOWS. Rufus M. Brundage, New York, N. Y.
237,076. BURGLAR ALARM AND DOOR FASTENING.—Chas. F. Cray, New York, N. Y.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—Eight building permits have been issued since the last report; the following only are of sufficient importance to be mentioned:—

Trego Thompson, three-story brick factory, n e cor. Central Ave. and Alliceanna St.

Otto Decker & Co., one-story brick building, addition to factory, cor. Canton Ave. and President St., 28' x 89'.

New SILVER VAULT.—Seven proposals have been submitted for the construction of the new silver vault at the Baltimore Sub-treasury, and sent to the Secretary of the Treasury. The contract has not yet been awarded.

IN GENERAL.—The indications are that the present year will be one of great activity in building operations in this city. The architects report considerable work, but not sufficiently advanced to be mentioned.

PUBLIC BUILDINGS.—Ordinances have been brought before the City Council, appropriating liberal sums for the erection of new public schools, market-houses and engine houses. No action has been taken on them as yet.

Brooklyn.

BUILDING PERMITS.—Flushing Ave., No. 1063, 1 three-story frame store and tenement, 23' x 50', tin roof; owner, Geo. Reschberg, 688 Flushing Ave.; builders, A. Vath and H. Loeffler.

McKibben St., n s, bet. Graham Ave. and Humboldt St., 1 three-story frame factory, 24' x 30', gravel roof; owners, Harlingsworth & Darless, McKibben St., near Graham Ave.; builders, J. Fuchs and John Rueger.

Putnam Ave., n e cor. Irving Pl., 1 three-story brick flats, 24' x 33', felt and gravel roof, wood cornice; owner, Wm. O. Thompson, 9 Putnam Ave.; builder, O. D. Thompson.

ALTERATIONS.—North First St., n e cor. First St., repair damage by fire; cost, \$2,000; owner, Mrs. Richardson, 49 Grand St.; architect, W. H. Gaylor; builders, W. T. Lamb and Jenkins & Gillies.

Water St., No. 255, add one story to part of building, tin roof, etc.; cost, \$2,000; owners, E. R. Durkee & Co.

Wythe Ave., Nos. 88 and 90, one-story brick extension, 23' x 40'; cost, \$3,500; owner, William Ross, 53 Wythe Ave.; architects, Farrist Bros.

Boston.

BUILDING PERMITS.—Wood—Howard St., corner Myrtle St., for Burnham C. Dennett, dwell., 24' x 30', two stories and hip roof; Burnham C. Dennett, builder.

Humbolt St., near Bellevue Ave., for Thomas Patterson, dwell., 18' x 24', two stories, hip roof; Thomas Patterson, builder.

Norwood Ave., near Mt. Hope St., for Robert L. Frampton, dwell., 22' x 30', two stories, L 12' x 16'; Wm. R. Hudson, builder.

SCHOOL-HOUSES.—The brickwork of the grammar school-house, Egleston Square, is completed to the third story, and the coming fall will see the building ready for occupancy. The appropriation for this house is \$45,000.

The primary school-house, Seventh St., South Boston, is to be of brick, and contain eight rooms, and will cost, for land and building, the sum of \$50,000.

The foundations are in, and the superstructure will be commenced in the early spring, and the building completed in the coming fall.

Buffalo.

STORERS.—Mr. E. C. Beebe has completed plans for a block of four stores, to be built on Eagle St., near Main St.; owner, Gibson T. Williams; cost, \$25,000.

Mr. F. L. Bacher, of this city, is going to build a store on Tennessee St., near Oak St., 50' front by 60' deep; will cost about \$18,000; Mr. Geo. J. Miltzer is the architect.

Chicago.

BUILDING PERMITS.—J. J. Rice, two-story brick store and dwell., 21' x 45', 3310 State St.; cost, \$2,000.

Kroeschell & Bro., one-story brick boiler-shop, 40' x 100', Michigan and Kingsbury Sts.; cost, \$1,600.

W. L. and C. I. Peck, four-story brick store, 80' x 135', 106 Lake St.; cost, \$35,000.

C. Werner, three-story brick dwell., 24' x 60', Cottage Grove Ave. and Twenty-Fifth St.; cost, \$7,000.

St. Loberet, two-story brick dwell., 22' x 50', Taylor St., near Centre Ave.; cost, \$3,000.

Henry Strong, five-story brick store, 60' x 90', Fifth Ave. and Monroe St.; cost, \$3,500.

New York.

BUILDING PERMITS.—West Twenty-Ninth St., No. 507, 1 four-story brick store and tenement, 24' x 78'; cost, \$10,000; owner, Daniel McElhinney, 427 West Forty-Third St.

West Sixteenth St., No. 215, 1 five-story brick tenement, 25' x 60'; cost, \$12,000; owner, J. H. Mason, Christopher Mooney, 30 West Eighteenth St.; architect, J. I. Howard.

Forty-Fifth St., s s, 250' e Eleventh Ave., 3 five-story brick tenements, 25' x 65'; cost, each, \$4,500; owner, John Mullaly; architect, W. H. Canvett.

Seventy-Second St., s s, 100' w Lexington Ave., 5 four-story brown-stone dwellings, 20' x 60' and 74'; cost, each, \$20,000; owner, John K. Kalam, 874 Lexington Ave.; architect, J. G. Prange.

Eighty-fifth St., n s, 258' e Fifth Ave., 2 four-story brown-stone dwellings, 21' x 60' and 75'; cost, each, \$15,000; owner, W. E. Croft, 5 East One Hundred and Twenty-Fifth St.; architect, J. G. Prange.

East Fourteenth St., No. 28, 1 five-story iron store and offices, 25' x 103' 3"; cost, \$20,000; owner, Joseph J. Little, 4 Van Nest Pl.; architect, W. W. Smith.

Lexington Ave., n e cor. Seventy-Second St., 10 four-story brown-stone dwellings, 18' x 20' and 24' x 65'; cost, each, \$12,000; owners and builders, Thos. Smith and John Bannan; architect, S. D. Hatch.

Eighty-second St., s s, 206' e First Ave., 5 four-story brown-stone tenements, 25' x 60'; cost, each, \$11,000; owner, W. R. Croft, 419 East Eighty-Fifth St.; architect, J. C. Burne; builder, J. A. Frame.

First Ave., n e cor. Eighty-Sixth St., 1 four-story brown-stone store and tenement, 25' x 60'; cost, \$15,000; owner, architect and builder, same as last.

First Ave., n s, 25' e Eighty-Sixth St., 3 four-story brown-stone stores and tenements, 25' x 60'; cost, each, \$14,000; owner, architect and builder, same as last.

First Ave., s s, 109 n Eighty-Sixth St., 3 four-story brown-stone tenements, 25' x 60'; cost, each, \$14,000; owner, architect and builder, same as last.

First Ave., n e cor. Eighty-Seventh St., 1 four-story brown-stone store and tenement, 25' x 60'; cost, \$15,000; owner, architect and builder, same as last.

Eighty-Sixth St., n s, 74' e First Ave., 1 four-story brown-stone tenement, 22' x 70'; cost, \$16,500; owner, architect and builder, same as last.

Eighty-Seventh St., s s, 74' e First Ave., 1 four-story brown-stone flat, 22' x 70'; cost, \$16,500; owner, architect and builder, same as last.

Eighty-Sixth St., s s, 25' e Ave. B, 5 three-story brick flats, 20' x 36'; cost, each, \$9,000; owner, Emma J. Johnston, Astoria, L. I.; architect, Jno. C. Burne; builder, Jno. Askey.

Eighty-Sixth St., s s, 308' w Ave. B, 2 three-story brown-stone dwellings, 12' x 50'; cost, each, \$8,500; owner and architect, same as last.

One Hundred and Twenty-Fifth St., n s, 281' w Sixth Ave., 1 four-story brown-stone flat, 19' x 55' and 20-foot extension; cost, \$14,000; owners, etc., Aldhaus & Smith, 161 East One Hundred and Twenty-Fourth St.; architect, J. C. Burne.

One Hundred and Twenty-Sixth St., s s, 225' e Seventh Ave., 1 three-story brown-stone dwell., 18' and 18' x 62'; cost, each, \$12,500; owner and architect, same as last.

Eighty-fifth St., s s, 229' e Third Ave., 2 four-story brick apartment-houses, 18' x 60'; cost, each, \$14,000; owner, Thos. H. Walker, 177 East One Hundred and Fourth St.; architect, J. C. Burne.

Seventy-Fifth St., n s, 95' e Lexington Ave., 1 four-story brown-stone tenements, 18' x 60'; cost, each, \$15,000; owner, Mrs. S. T. McCool, 117 East Fifty-Seventh St.; architect, Jno. C. Burne.

Seventy-Fifth St., n s, 170' e Lexington Ave., 3 four-story brown-stone tenements, 20' x 60', tin roof, iron cornice; cost, each, \$20,000; owner and architect, same as last.

Kingsbridge Road, w s, 200' s Church St., Twenty-Fourth Ward, 1 two-story frame dwell., 28' x 31', and wing 14' x 17'; cost, \$3,500; owner, A. E. Putnam, Spuyten Duyvil; builder, S. L. Berrian.

ALTERATIONS.—Broadway and Crosby Sts., corner Prince St., Metropolitan Hotel, repair damage by fire; cost, \$5,000; owner, Mrs. C. M. Stewart; architect, E. D. Harris; builder, W. N. Rave.

Nineventh St., three-story brick extension, 8' x 15', tin roof, iron cornice; cost, \$2,000; owner, John Foster, 203 East Nineteenth St.; architect, B. W. Bergen; builder, M. McGrath.

Ave. B, Nos. 252 to 258, cor. Seventeenth St., iron columns, new girders, windows removed, etc.; cost, \$15,000; owner, U. S. Electric Lighting Co., 120 Broadway; builder, Geo. Turney.

John St., No. 21, repair damage by fire, \$3,750; owner, Estate Thos. Saffern, 122 Madison Ave.; builder, Henry Wallace.

Henry St., No. 220, raised two feet, flat tin roof and three-story brick extension, 24' x 15'; cost, \$3,000; owner, Abraham Mor-

(Continued on next page.)

FEBRUARY 19, 1881.

Entered at the Post Office at Boston as second-class matter.

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ACCOUNTS come from Cincinnati and New York of threatened strikes among workmen for an advance in wages. The New York carpenters will demand the large increase of fifty cents per day after April 1, and the fresco-painters' union has already given notice of an advance in rates from three and a half to four dollars per day. In Cincinnati, the printers' union, the stove moulders, the masons and carpenters, and the furniture makers, have given notice that higher pay will be required. We are glad to see that the building trades generally have had the good sense to warn their employers of the rise, which is ordered for April 1, in time to enable them to make their contracts intelligently. By this fair and reasonable proceeding they put themselves in a position to gain what they wish without difficulty, since the builders, knowing what to expect, and being all affected alike, can advance their own market to suit the altered circumstances without incurring loss. This is a very different thing from the sudden assaults of men upon their employers in the hope of extorting a few cents by the threat of late ruin to their business which have been too common of late years, and it is pleasant to see that American common-sense is beginning to influence some of the more intelligent unions. The foreigners in Cincinnati think the time is favorable for agitation in favor of an eight-hour law, but we have faith enough in American energy to believe that the demand for time to spend in idleness will never become very general here.

THE "Carpenters' and Joiners' Protective and Benevolent Association" of Chicago, following the example of other cities, has issued a circular, under date of February 4, of which we have been favored with a copy. After speaking of the rise in rents and in the prices of the necessities of life with the revival of business, the circular says that the carpenters and joiners of that city have never been justly paid for their work in comparison with members of other trades, and that it seems to the members a duty to themselves and their families to stand up for their rights and ask an equal share in the prosperity of the day; "always," however, "opposing the baneful maxim of strikes." They therefore announce that they have agreed from and after April 1, 1881, not to work for less than three dollars per day, nine hours to constitute a day's work on Saturday, and ten hours on all other days. Nothing, it seems to us, could be more business-like than this document, which gives reasonable notice of an advance in the price of a certain commodity, namely, skilled labor, just as the jobbers of cotton goods in New York would announce to their customers an advance of a cent a yard in brown sheetings. If the market will not sustain the increased price, the dry-goods jobbers have to retreat, and so may the carpenters, but if they are sensible men they will bear the reverse quietly, and try again at a more favorable opportunity. How different such proceedings are from the antics of the ordinary "organizers of labor" need not be said. What would be said, for instance, of an association of dry-goods dealers, who, having the same object in view as the Fall River weavers,

namely, to sell their wares to the best advantage, should, like them, hire a man at a liberal salary to malign their customers, to extol the most insolent and dishonest among their own number, and put obstacles in the way of the transaction of their own business? Or what would Wall Street say if the brokers, after one of their number had been deservedly kicked out of a merchant's counting-room, should close their offices, and like the Cohoes weavers, march in procession about New York, weeping and howling, and carrying banners inscribed "We are slaves"? Yet such performances would be no more foolish than the demonstrations in which the large class of workmen who are too conceited or debased to comprehend either their rights or their duties spend every year millions of the dollars which they need so sorely, and millions more of their employers' money, which they have still less right to waste.

A SINGULAR explosion took place recently in Westchester County, New York, in the retort-house of a local gas company. It appeared that the purifying apparatus was furnished with blow-off pipes for removing sediment from the washing liquid, and a workman, after blowing out a quantity of sediment, left the valve open, so that a large quantity of gas followed it, filling the place until it reached the wash-room, in which a light was burning. No immediate effect seems to have followed until the door was opened by one of the employees, when the gas exploded, blowing the roof of the building high into the air, throwing out the front wall, and hurling three men a distance of nearly forty feet. Fortunately, none of them were seriously hurt, and although the building was completely demolished, the pipes and machinery were uninjured, and nothing was set on fire. The flame of an explosive mixture of illuminating gas and atmospheric air is extremely light, but the violence of the detonation is so great that the men who suffered its full effect without fatal injury or shock must be deemed fortunate. We notice that electric-light wires have again been giving trouble. A telephone instrument has been destroyed by accidental contact of the lines, and there have been some narrow escapes from fatal injury to persons handling them. Considering the carelessness with which these wires are strung around buildings, it will hardly be long before worse mishaps occur.

MR. E. D. HARRIS, architect to the Stewart estate, which owns the Metropolitan Hotel in New York, writes us to say that we "either intentionally or ignorantly" did injustice to the present holder of the property in speaking of the recent fire in the dining-room of the hotel as caused by a "defective flue," and wishes us to retract the statement on his authority, which we very cheerfully do. Our information was derived from the New York daily papers, and was so explicit that although we were quite aware of the remarkable solidity which characterizes most of the buildings erected for the late Mr. Stewart, this instance seemed to have been exceptional. Mr. Harris informs us that after the fire in 1879 a careful examination was made, showing the kitchen flue to have been at fault, and all the flues were then inspected and made secure, while the wooden furrings on the walls were, as an additional precaution, removed and replaced with fire-proof blocks. The thoroughness with which this was done is shown by the result of the second inquiry into the cause of the recent fire, conducted by the architect and a deputy from the Department of Buildings, which showed conclusively that "no defect in the flues or in any other part of the building could be charged with the accident." We wish all architects could be sure that investigations into the origin of such accidents in the buildings erected under their care would result as favorably.

MR. WILLIAM F. POOLE, Librarian of the Chicago Public Library, read before the American Library Association last week an interesting paper on the construction of library buildings, which he thinks to be now, as a rule, very imperfectly adapted to their intended use. In brief, he condemns the alcove and gallery system of planning entirely, asserting that the books in the upper tiers of lofty buildings are injured by the excessively hot, dry air which accumulates there, and is found to affect the leather bindings very seriously, while the health of the attendants suffers from the fatigue of ascending and descending from one gallery to another. As he very justly says, also, the interior space between the rows of alcoves, which is

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BUILDING INTELLIGENCE.

St. Paul's M. E. church, on Yellow Spring
— waiting for a thaw. It is built in the
style of brick with limestone finish; cost,
\$10,000. Architect, J. H. Penfield.

Chicago. — The trustees of water-works who
last month have advertised for bids on
plans, etc., for the new water works to be
built; also for the erection of a metal-
lurgical, the height to be 14' inner diameter,
Cook, of Toledo, O., consulting engineer.

Washington.

Permits. — The noteworthy permits for
lines issued during January are as follows:
Hess, dwell., N. J. Ave., between K and
L Sts., \$12,000.

Wyer, store, cor. Fayette and Bridge Sts.;

possible, dwell., L St., between Twelfth and
th Sts., n.w. cor. \$1,000.

div Adams, store, E St., between Eighth
and 9th, n.w. cor. \$1,000.

dwelling, cor. Eleventh and T Sts., n.w.;

1881.

General Notes.

Mass. — It is reported that \$100,000 have
been voted to Harvard University to build a new
text for the Law School.

Tex. — The Bailey Estate is to be remodel-
ed into a family mansion, and there will also be a
banquet. C. S. Wetzel, architect.

Protestant Episcopal Society are to build an
ice-house church this coming season, corner
of 1st and Pine Sts. The church will be the
one in this section of the State.

Calif. — The probabilities were that we will
see an extension to our market on the coast
extending from the centre of the city buildings
to the south.

Payson Twelfth-Pence Company has pro-
posed extensive block of tenement houses in
Payson, and will begin the work upon the en-
d at as early a day as possible.

(Continued on next page.)

NOTES AND CLIPPINGS.

THE WALL STREET, NEW YORK, WASHINGTON STATUE. — At a late meeting of the Chamber of Commerce, Mr. Royal Phelps, for the special committee on the Washington statue in Wall Street, presented a report and the following recommendations, which were unanimously adopted:

First. — The erection of a statue in bronze to George Washington alone, commemorative of his inauguration as the first President of the United States.

Second. — That it be placed on the abutment of the Sub-Treasury Building, on the corner of Wall and Nassau Streets.

Third. — The said statue shall be in all respects a complete embodiment of the exalted character of Washington, together with the great event the statue commemorates, and that no expense be spared to make it in all respects worthy of the cause.

Fourth. — That J. Q. A. Ward, the sculptor, be requested to make a model in clay of the statue, accompanied by suggestions in regard to site, base, relief, ornamentation of pedestal, exact locality, etc., it being understood that if the committee should approve and adopt his plans, designs and terms, that Mr. Ward will be employed to do the work. If, on the contrary, his plans, designs and terms should not meet the approbation of the committee, he shall be paid \$1,000 for his model.

Fifth. — That subscriptions be received at the rooms of the Chamber of Commerce, and by the Treasurer, Morris K. Jesup, No. 62 William Street, for carrying out the foregoing recommendations.

Mr. Phelps said that the minimum cost of the statue is put at \$30,000 and the maximum cost at \$50,000.

THE CENSUS OF THE UNITED STATES FOR 1880. — The Speaker laid before the House Jan. 17, a letter from Supt. Walker, of the Census Bureau, transmitting the official aggregates of the population of the United States. The figures are as follows:

Alabama.....	1,262,794	Louisiana.....	910,100	North Carolina.....	1,400,047
Arkansas.....	892,564	Maine.....	648,051	Ohio.....	3,194,220
California.....	863,086	Maryland.....	684,632	Oregon.....	174,767
Colorado.....	191,619	Massachusetts.....	1,783,012	Pennsylvania.....	4,282,756
Connecticut.....	652,683	Michigan.....	1,636,331	Rhode Island.....	276,528
Delaware.....	146,624	Minnesota.....	760,492	South Carolina.....	195,672
Florida.....	267,351	Mississippi.....	1,130,592	Tennessee.....	1,512,163
Georgia.....	1,539,048	Missouri.....	2,168,801	Texas.....	1,592,574
Idaho.....	3,078,969	Nebraska.....	452,433	Vermont.....	232,286
Indiana.....	1,623,982	Nevada.....	62,283	Virginia.....	1,512,906
Iowa.....	1,623,629	New Hampshire.....	316,384	West Virginia.....	618,433
Kansas.....	665,961	New Jersey.....	1,150,983	Wisconsin.....	1,315,480
Kentucky.....	1,648,708	New York.....	5,083,810		
Total States, 49,361,593; District of Columbia, 177,628; Territories, 606,643.					
Grand total, 50,145,864.					

TESTING DRAIN PIPES. — A writer in the *Ironmonger*, from long practical experience in testing drain pipes, confidently recommends for that purpose what he terms a "smoke test," and which gives evidence as to leaks both to the sight and smell. The materials that he employs are soiled cotton-waste and sulphur, the smoke from which, after ignition, is blown into the drain or pipes. If leakages exist in the latter inside of the house, the smoke and smell both issue forth and show that something is wrong, and generally tell also just where the fault or faults are. Sulphur, as well known, is one of the best of disinfectants, and a dose of the fumes from this to the drains, after disease has been in a house, would effect much good.

VOLATILE DISINFECTANTS. — In the Parkes Museum of Hygiene, in London, there are two appliances for charging the air of a room with antiseptic vapor which are worthy of note. One of these, as described, consists of a miniature "round towel," circulating on two rollers, the lower of which rests in a trough filled with a solution of carbolic acid, or any other soluble disinfectant. The other apparatus consists of a metal box filled with Norwegian tar, the lid of the box being provided with metal laminae which are immersed in the tar; when the apparatus is to be used the cover is raised, and the tar-covered laminae are exposed to the air — the odor being at once perceptible throughout the apartment, and highly beneficial as a disinfectant, or inhaled by a tube connected with the apparatus.

HOW ST. PAUL'S IS PROTECTED AGAINST LIGHTNING. — The application of lightning conductors to St. Paul's Cathedral, London, has recently been successfully accomplished. In metallic connection with cross and ball and scrolls are eight copper conductors, each being a half-inch strand of copper wires, this octagonal strand giving the most metal in the least space; these eight conductors pass to the metal railing of the "golden gallery," with which they are in metallic connection; thence they are carried down to the dome, to the metallic surface of which they are again connected at several portions of their length; then down the water-conductors over the leaden roofs of the aisles, in the angles formed by the aisles themselves; again down the water-conductors to the sewers. Further, the choir and nave roofs are connected together by a saddle, or conductor, stretching over them both, and joined to the other conductors. The plan pursued has been, comprehensively, to bring into metallic connection every portion of the vast building that has metal, and to connect these with the moist earth.

POMPEIIAN BRONZE STATUETTES. — Four bronze statuettes, which have recently been found at Pompeii, are now to be seen in Naples. One is a magnificent work about two feet high, representing a cupid holding a dolphin on his right shoulder, the head of which he grasps with his left hand. This figure was found on a pedestal at the side of the entrance to the peristyle of a newly-excavated house, and was a fountain. From the mouth of the dolphin water fell into a beautiful marble vase placed on a marble column. In a niche on the right of the atrium of the same house were found three other bronze statuettes. The one in the middle was placed on a square base. It represents the Goddess of Abundance, having in her right hand a silver plate, in the left a cornucopia full of fruits and flowers. It is draped with a long tunic with short sleeves and a mantle, and is seated on a cushioned chair with magnificently ornamented arms, each of which has a Triton at the extremity. The feet of the goddess are sandalled, and rest on a footstool decorated with two sphinxes. The two lateral statuettes represent two Jari, each with a ryton in the right and a plate in the left hand. — *London Standard*.

A PRIMITIVE PERSIAN MOSQUE. — A correspondent of the *Daily News*, who has been travelling in out-of-the-way districts of Persia, has given an account of a building near Kachan, which is supposed to have been the palace of an early Mussulman sovereign. It is a cylindrical structure, built of flat, brownish bricks, and having a conical roof of the same material. The entire height is about 80 feet, and its external diameter 45 feet. Within the diameter is 30 feet. The foundation is of large, unliken pieces of stone from the neighboring mountains. The base of the building, to a height of eight or nine feet, is octagonal; above that it is circular, and ornamented with pilasters about two feet in diameter, having capitals resembling the lotus in form, placed so close together that it might rather be said that the wall was fluted. They are separated by an interval of about eight inches, and are composed of the same flat bricks as the rest of the building, arranged in the form of the letter L, placed back to back, and one within the other. The bricks are, of course, edge outward. At the edge of the roof, and partly piercing the vertical wall, are four windows looking to the cardinal points. Twenty-five feet lower down, and exactly under these, are four others, their exterior apertures opening between the pilasters, and being only four inches wide by twelve inches in height. On the interior they widen like a musketry loophole to a breadth of two feet and a height of three feet. There are two doors on a level with the ground at opposite sides of the building, looking respectively east and west, but their architectural features have quite disappeared, owing to the removal of bricks by the peasants. A cornice of slight relief surmounts the entablature, which latter is about seven feet deep, and was originally covered with enamelled tiles of a beautiful deep-blue color, varied by vertical bands of some kind of fine concrete or stucco, bearing large quatrefoil ornaments. The use of the building is a puzzle. It resembles some of the structures at Kars, which are supposed to be tombs, but they are of less height. The correspondent supposes the building to be some primitive form of a mosque, if not a pre-Mohammedan temple. — *The Architect*.

THE CHANNEL TUNNEL. — The statement of Sir Edward Watkin on the British Channel Tunnel at the last meeting of the Southeastern Railway in London imparts a rather more business-like aspect to a scheme which most Englishmen regarded as a chimera. He said that they were entirely in accord with their allies — the Northern of France Railway Company — with the house of Rothschild, and also with M. Léon Say, and a distinguished body of scientific men and engineers. They were about to commence some experimental works, and they were about to invite their French friends over, and as soon as they had bored a mile through the chalk — the distance prepared for the experiment — they intended to invite the shareholders to see the work. The difficulties are the questions of boring, of the application of the requisite power, of drainage, of ventilation, of the removal and introduction of material, of the disposal of the unwholesome if not deadly vapor from the engine furnaces, of accidents, perhaps terrible explosions in mid-tunnel, and of the almost inevitable faults in the stratum. But already Sir Edward Watkin hopes, with improved harbors and boats, to reduce the journey from London to Paris to seven and a half or eight hours, and to substitute fixed for tidal services. This would enable a Londoner to leave the city at five in the morning and be back again at eleven at night, after seeing in two or three hours as much of Paris as most Parisians ever care to see. The tunnel will give him twice as much time for Paris. It will reduce the journey from Dublin or Edinburgh to Paris to the length of a summer's day. The *London Times* discusses the political consequences of its construction, and says: "The tunnel will seem to be a danger and a continual menace. Its possession would be equivalent to the command of the Channel."

DEPTH OF THE FROST. — Frost penetrates to very different depths in the ground, according to the nature of the soil and the amount of exposure. Workmen engaged in thawing out the ground with coal fire, for the purpose of taking up a water-pipe on Windsor Avenue, just above Avon Street, a few days ago, found the ground frozen hard to a depth of two feet or more, at the edge of the gutter; while on the inside of the walk, not twenty feet from that point, the frost had penetrated but nine inches. In the first case it was a stiff, clayey soil; in the latter, sandy. On the other side of the street some preliminary digging on the proposed site of a new building revealed a still less depth of frost — only half a foot. That was a sandy loam, somewhat protected. The general depth of the frost in most parts of Connecticut is probably two feet, and it would be greater but for the protecting cover of snow, which averages at least two feet deep, and is very compact. — *Hartford (Conn.) Times*.

A PORTUGUESE POMPEII. — M. Magiot, a member of the Prehistoric Congress which met at Lisbon last autumn, reports on a Portuguese Pompeii, which he had occasion to inspect while on a tour to the territory of tertiary silex at Otta. The place is called Santarem and Citania. The latter is the general Portuguese name for ruins of ancient towns, which cover entire hills in the neighborhood of Braga. The most important of these very old town ruins is the Citania di Bratelros, which occupies nearly a kilometre square, and is supposed to be of Celtic origin. Circular walls, streets, squares, large architectural monuments, and even a number of houses have retained their typical form. For twenty centuries this Citania was buried below debris, soil, and a rich vegetation; only a few years ago a zealous archaeologist, Señor Sarmiento, succeeded, by costly and troublesome efforts, in clearing away the covering of centuries and to lay open to the world an ancient city in which quite a primitive state of civilization is apparent. Its architecture and plastic ornamentation point to a somewhat advanced state of art and industry. Many stone monuments are covered with sculptures and inscriptions, which in their general character recall those of India and China, which the well-known Lyons archaeologist, M. Guimet, declares to be of a symbolic and religious character, similar to those found upon the Oriental monuments. It is possible that this fact might be adduced as a proof that the tribes who built these Citanias had originally emigrated from Turan.

BUILDING INTELLIGENCE

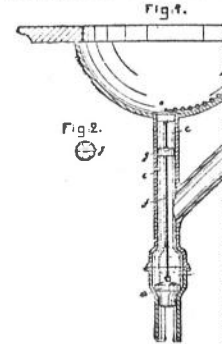
(Reported for The American Architect)

Although a large portion of the building intelligence reported by their regular correspondents is desired to receive voluntary aid from the smaller and outlying

BUILDING PATENTS

(Printed specifications of any patent superior with full details illustrating the commissioner of Patents, at Washington, D.C.)

25,624. VALVE FOR WASTE-PIPE. — Invention is an improvement on a J.C. Inglett, on which Letters Patent were granted July 13, 1880. In the valve was shown placed in a valve at the junction of the waste pipe and a wash bowl, it being made as a plug, weight upon a tapering seat, and closed to prevent the escape of gas, should be positively raised to allow from the bowl. As shown, the valve is connected by a rod, upon which is a short distance below the raising the stopper sufficiently to allow the strainer remains in the of junction with wash-bowl, but screen can be raised enough to allow the valve, a, in the valve-chamber waste-pipe, c, below its junction with



pipes, d, are all substantially as in the drawing. The valve, a, is connected with the waste-pipe, c, so as to be raised simultaneously with the screen, g, a short distance below the stopper, f, to prevent the passage of gas. The stopper, f, is pivoted to the screen, g, by a chain, h. When the bowl is to be emptied, e, is raised in the usual manner and opens the valve, a, the screen, g, being brought a little nearer the seat, i. The valve, a, will always fall to its weight and completely close the waste-pipe, c, and prevent the passage of gas through the pipe, d. It will answer very well as a portion of the connector between the screen, g, rigid, the part below the flexible. The stopper, f, will then properly come to its seat at the top of the valve, a, to close.

25,762. MEMORY-SEAL FOR STEAM-BOILER. — Invention is an improvement on a Joseph Benner, Philadelphia, Penn. **25,763. COVERING FOR STEAM-BOILER.** — Invention is an improvement on a William M. Bitter, Philadelphia, Penn. **25,765. LEAD AND CRAYON HOLDER.** — Invention is an improvement on a Bonham, New York, N.Y. **25,767. FIRE-PROOF BUILDING.** — Invention is an improvement on a Philadelphia, Penn. **25,768. SEWER AND STENCH-TRAP.** — Invention is an improvement on a stand, New York, N.Y. **25,769. LEAD AND CRAYON HOLDER.** — Invention is an improvement on a Hoffman, New York, N.Y. **25,770. MITERING MACHINE.** — Invention is an improvement on a Fredericktown, Mo. **25,771. GLASS, TILE, Mosaic, ETC.** — Invention is an improvement on a New York, N.Y. **25,772. COLORED GLASS WINDOW.** — Invention is an improvement on a New York, N.Y. **25,773. THE SAME.** — Invention is an improvement on a New York, N.Y. **25,774. CLAMP FOR WOOD-WORK.** — Invention is an improvement on a Davenport, Providence, R.I. **25,775. FILTER.** — Invention is an improvement on a Julius Berger, New York, N.Y. **25,776. ARC-BRIDGE.** — Invention is an improvement on a Sylvester, Conn. **25,777. WHEEL OR TOOL FOR CUTTING STONE, WOOD, ETC.** — Invention is an improvement on a Henry I. White, Tenn. **25,778. SPRING-HINGE.** — Invention is an improvement on a Frederick, New Haven, Conn. **25,779. LATHING.** — Invention is an improvement on a Philatus B. Conk, Brooklyn, N.Y. **25,780. MANUFACTURE OF HYDRAULIC LIME.** — Invention is an improvement on a John Hineslow and Isaac Round Rock, Tex. **25,781. HOT-WATER APPARATUS.** — Invention is an improvement on a banks, St. Johnsbury, Vt.

complete in every respect. Fire-plugs are located in stable and carriage-house, in the hall between the same, and others on the north and south sides external to the building. The bath, water-closet, soap-stone and china sinks in feed, wash and harness rooms, are large size, and furnished with nickel-plated fixtures. A Hitching's furnace with water connections, in wash-room, supplies hot water to the establishment. All the drainage is underground; the pipes are large and heavy, thoroughly trapped and ventilated, and draining into two cess-pools, 10 feet diameter by 30 feet deep, distant 130 feet from the carriage-house. The stalls have bell-trap inlets, each inlet-waste trapped into main drains. The water from roofs and drives surrounding the building is conducted by twelve-inch terra-cotta drains into a creek 150 feet distant. The building is lighted with gas. The pipe and fixtures in stable are nickel-plated; elsewhere of polished brass. The grain-bins are rat-proof and connected with feed-room on ground-floor by seven chutes having patent "grain cut-offs." A telephone connects with the mansion. Cost, complete, \$48,000.

SAINT MARK'S CHURCH, ADAMS, MASS.—MR. W. C. BROCKLESBY, ARCHITECT, HARTFORD, CONN.

This church will be built of local limestone, with finish of Ohio stone. A portion of the interior finish will be executed in pressed brick and terra-cotta. The contracts for the building were signed last month, and work will be commenced early in the spring. The designs of the architect were accepted in competition.

HOUSE FOR SAMUEL M. NICKERSON, ESQ., CHICAGO, ILL.—MESSRS. BURLING & WHITEHOUSE, ARCHITECTS, CHICAGO, ILL.

This building is one of the few fire-proof houses in the city. The brick partition-walls are carried one above another to the roof: the floors are of brick arches turned between iron beams upon which bedded in mortar are the flooring strips to which the flooring boards are nailed.

COTTAGE FOR J. H. CURTIS, ESQ., N. E. HARBOR, ME.—MR. GEORGE MOFFETTE, ARCHITECT, BOSTON, MASS.

GAS-HEATING AND LONDON SMOKE.

It is scarcely reasonable to expect — so soon do we happily forget our ills — that the average Londoner of to-day should be able to realize effectually the dolorous manner in which the average Londoner of five-and-twenty or thirty years ago used actually to hold his nose as he crossed the bridges or went to and from business on the penny boat. What the philosophers call a fixed idea had taken possession of people's minds to the effect that the dreadful dirtiness of the river was part of itself, and would last as long as the current would run — which would not be forever, though, after all (as would be jocularly remarked), seeing that the time must probably come at last when the old channel would be choked up by the more substantial cause of the smells, and the water would have to find for itself a new one. So completely had patience conquered its throne, however, that the nuisance had become a mere subject of hilarity, and the man was counted a pragmatical prig who would regard "Filthy Old Father Thames" as anything else than a rollicking old joke. But one of those accidents at length intervened which, all through the generations of man, have determined the eventual shaping of his ends, rough-hew them how he may. The House of Commons had to sit a little farther into the dog-days than usual. If it had been only the House of Lords, or the Courts of Law, nothing might have happened; but it was the House of Commons. The "filthy old Father" had the misfortune — so far as his conservatism was concerned — to have somewhat supersaturated himself with his stenches that year. He was the same rollicking old blade as usual, only he smelt rather worse. The fine gentlemen in the Commons experienced a new sensation; inquired what was the cause of it; nosed it out to the river flowing so unconsciously by; and without more ado resolved to embank the river and restrain the town. The result we know and appreciate.

Another analogous case was that of the London engine-chimneys. Bad as the smoke is now, it was much more demonstratively and competitively obnoxious when every tall shaft in the metropolis was belching forth at pleasure its cloud of funeral fumes. Again an accident happened. My Lord Palmerston, taking the Home Office instead of the Foreign in his happy-go-lucky way, in order to make things pleasant for the moment with somebody else, had the idea presented to him, as to his predecessors time out of mind, that it would be a lively thing to compel engineers to consume their own smoke. His lordship liked the idea vastly; adopted it promptly; passed a little bill; and ever since that day the police magistrates have been fining everybody who, having smoke worth consuming, fails to consume it. Here again, when the thing is accomplished, the public enjoy the benefit; and a cockney who sees a factory-chimney smoking away in blessed unrestraint in a country town only wonders why the policeman stands by and allows it.

What accident is to have the supreme credit of abolishing the London fog it is impossible to say, but it is fair to suppose that what was a natural law for filthy old Father Thames and the engine-chimneys will be the same for the demon of the fog, and that nothing but hazard will ever really reach him. But be this as it may, and changing our tone to one more serious, surely it is plain enough to everybody who knows enough of London, whether as resident or visitor, that the fog looks like a thing that must be gravely tackled some day. It is not to be taken for granted that such a shocking abuse of Nature

is an incident inevitable. If it seems very hard of cure, it is not to be supposed that the cure is never to be attempted. That there is the fixed idea of the dirty smoke, dirty smuts, and dirty fog being each one of them a thing to grin and bear is doubtless true enough. So also, by the way, there is the fixed idea of the London water being a thing to grin and bear. But (if we adhere to this last illustration) just as we see the authorities at last bestirring themselves in earnest now to procure clean water, so it must obviously be in course of time that they will put their shoulders to the wheel that is to abolish the smuts and the fog and give us clean air.

How it is exactly to be done is not the first question, as some easy-going souls will say it is. Even if we leave altogether out of the calculation how it is to be done, we are no less bound to urge upon the sluggish public mind that it must be done; and when it is at length decreed that done it shall be, we may be content to rest assured that there is quite enough of inventive skill in England to accomplish this, quite as well as the cleansing of the river, the consumption of the furnace fumes, and the supply of wholesome water. One thing, indeed, may be boldly said at once, and without any exaggeration being admitted: sooner or later either London must abolish its fog, or the fog will abolish its London. As the vast area of the town increases, as the population increases, as their density increases, as their dirt-producing work increases, as their sensitiveness to disease increases, the fog is increasing its effective power of attack, and the imprisoned victims are losing their efficient power of resistance. For the fog, it must be remembered, is not, as regards what may one day happen, a mere ordinary factor of death-rate, like bronchitis or typhoid-fever, but an abnormal pestilence, which is waiting for its opportunity to deal one good blow and have done with it. In a word it is by no means a difficult effort of the fancy to imagine a single day's work of fog more outrageous than usual decimating the population of the inner metropolis.

The cause of the fog has been explained many times, but we must explain it briefly once more. Wherever there is a large town lying along the banks of a great river, there is sure to be in moist winter weather now and then a sudden invasion from the open country of cold air, which, attacking the warmer air of the town saturated at the moment with moisture, occasions a large condensation of the atmospheric water-vapor, previously invisible. This makes the *white fog*. But the town air, thus laden with moisture, has also suspended in it a large amount of the gaseous and vaporous products of occupation — to use this somewhat euphemistic phrase to signify the miscellaneous and chaotic atmospheric dirt which is constantly escaping upwards from a great town by the kindly help of Nature, inducing it to ascend out of reach. In the thickening volume, therefore, of the *white fog*, all this dirt comes to be at once intercepted in its effort to escape; to use a plainer phrase, the "sweat" of the town clogs the air and makes the *yellow fog*. The smoke very soon makes this a *brown fog*, and by that time we are breathing, not the oxygen and nitrogen of heaven, but a hell-broth vapor of a hundred unctuous exhalations, innumerable varieties of dust and dirt, and a round half-dozen of actual pungent acids by name, with anything else that may lie handy to make matters worse and worse. How such a pestilent cloud ever gets dissipated again seems more of a marvel than its generation; but one thing we may certainly say is that it seems to disappear every year more slowly — as of course it necessarily must.

Now whatever we may be able or unable to do with the *white fog* of water, or with the *yellow fog* of town sweat, we may certainly see our way in one direction to deal with the smoke, which contributes to the cloud its peculiar aptitude for entangling and applying all else to the pestiferous purpose of poisoning mankind. The idea in question is the use of manufactured coal-gas for fuel, instead of the coal raw. It is of course not at all a novel suggestion, but it is one that appears to offer a clue to discovery; and as it will have to be urged upon the public over and over again a great many times yet before anything will come of it, we must not be led aside by the sneer that there is nothing new to be said about it.

So far as convenience goes, and cleanliness, it is scarcely necessary to ask for evidence in favor of the acceptance of gas-fires; but nevertheless there are two or three difficulties to overcome which are serious. First, there is the question of the cost of the gas as fuel. Here we have the satisfaction of being able to hope that, instead of merely reducing the additional cost of gas — which has hitherto been the chief purpose — inventors are now on the way to a material reduction below the present standard of cost of the raw coal itself. It seems strange to have to say so, but it seems to be the fact that an actual saving of our cash expenditure is the only consideration that will ever induce the present generation to try to grasp the notion of preferring a scientific material to an unscientific — such a thing as gas to such a thing as coal. But supposing this saving to be clearly made out, as we hope it soon may be, there comes up at once a second point of anxiety, how are all the millions of London fire-grates to be altered for the use of gas? The only answer to this is that time must be allowed; and we may of course add that the adaptations of old grates, and not the substitution of new ones, must be the mode of procedure. Then, thirdly, there is the financial question; the gas companies would obviously have to supply on credit, to those who are not only the impecunious but the improvident, the whole of their "fire and light," and, besides this, to face the very considerable risk of waste through both stupidity and wantonness, not to speak of the perhaps larger risk of bad debts among the great class of citizens who live from hand to

LEMENT, GENEVA.—The Brunswick is showing ominous signs of giving in many years ago was reclaimed from treacherous, for often beneath it and enormous holes hollowed out by the water swept over the present site of the large luke wall at Vevey disappeared behind. In the case of the Brunswick taken to assure its permanency by a thick and seemingly solid foundation of rubble, from present indications, that is, and that the structure is threatened complete destruction.

Wm. Penn.

W. Grace, two-story brick dwell., 22' x 62', 2725 Calumet Ave.; cost, \$4,500.

[Continued on next page.]

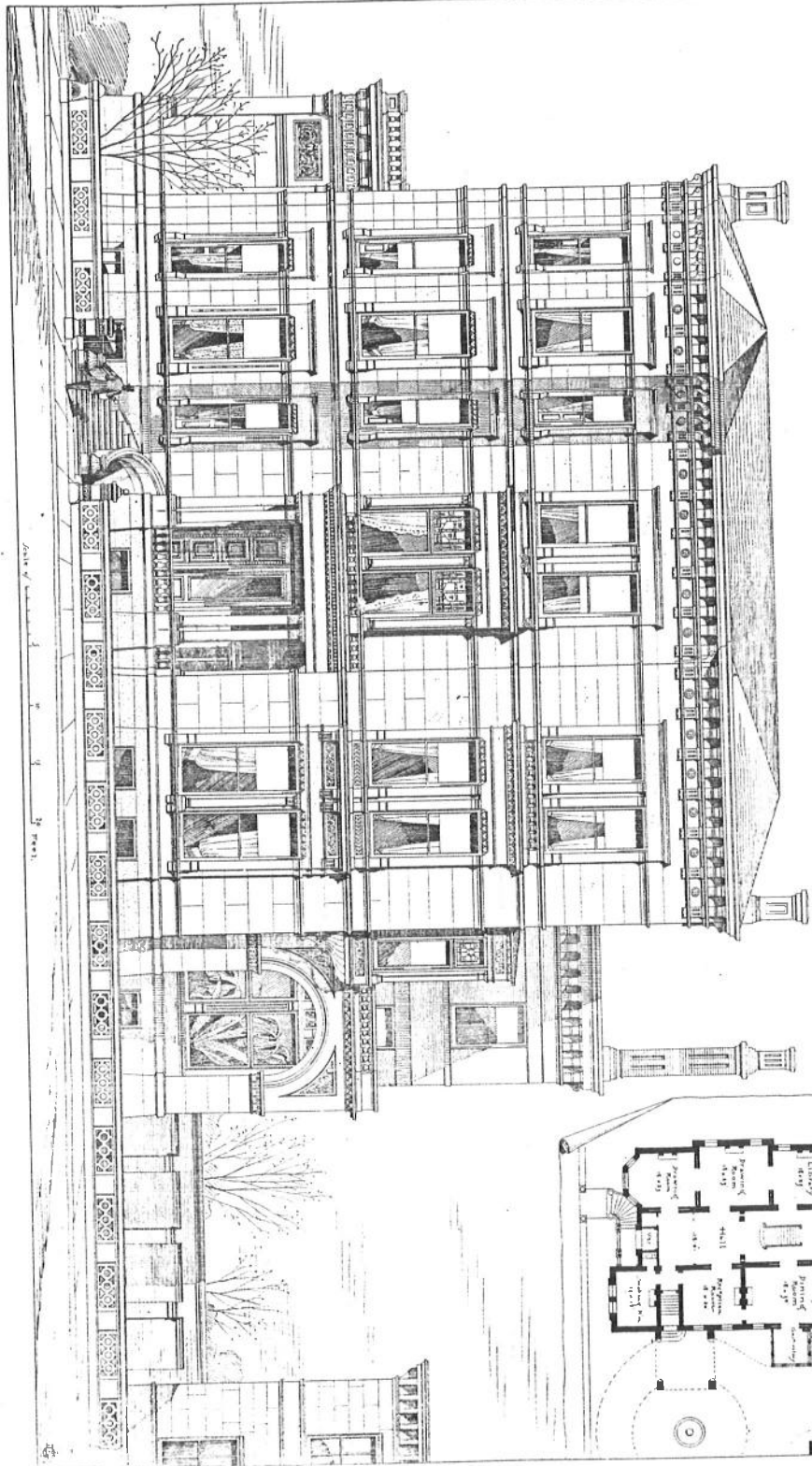
[Continued on next page.]

Residence of Samuel M. Nickerson Esq.

Wm. Burling & Whitehouse Architects
36 Clark St. CHICAGO.

CHICAGO, ILL.

FRONT ELEVATION



would be can hardly be imagined. Far quieter and more removed from the bustle of ferry, railroad and other traffic than the famous New York Battery, it would be also much more extensive, and although no landscape gardening or rural decoration would be possible in such a place, the owners of the neighboring houses, which are among the finest in the city, would be likely to find pleasure in adorning that portion of their land which bordered the new promenade in such manner as good taste might suggest. The maritime predilections of the Bostonians have clung to them longer than has been the case in New York and other cities, and the streets bordering the water, where not actually needed for the purposes of commerce, are still considered to be very desirable for residences. We hope this may long remain so, and that generations hence the descendants of those who inhabit the Boston of to-day will find the seaward slopes of Dorchester Heights, Milton and Quincy Hill as attractive as is now the "water side" of Beacon Street."

The use of "water-gas," as manufactured by the decomposition of water over heated coal, although rapidly extending, is now seriously opposed on account of its poisonous qualities. As is well known, this gas, as delivered by the companies, contains thirty or forty per cent of carbonic oxide, a most dangerous substance, which, unlike most gaseous poisons, cannot be eliminated from the system, when once inhaled, by exposure to fresh air, but is said to combine chemically with the red corpuscles of the blood, rendering its subsequent aeration impossible. There is therefore much reason in the demand made by several of the daily papers, that the introduction of this sort of gas into houses should not be allowed until after it had been impregnated with some admixture more powerful in odor than the carbonic oxide, by which persons would be warned of its presence in a room in time to escape injury. The matter is an important one, and while we do not remember any instance of fatal accident resulting from the use of the gas as supplied by the Municipal Company in New York and other cities, there are many cases where death has followed the inhalation of carbonic oxide in laboratories, and no precaution should be omitted to protect innocent or ignorant consumers of the commercial product from such casualties. A kind of burner is now extensively used which cannot be turned entirely out, but maintains a tiny flame in its sheltered interior, so that on opening the key the full flame appears at once, without using matches or other apparatus for lighting. This would be particularly useful with the new gas, by preventing the escape of unburned portions which ordinarily takes place in the act of lighting.

THE Emperor of Germany has, it is said, announced his intention of encouraging co-operative associations among workmen, elevating them socially and morally, and providing for the formation of workmen's accident insurance companies; and the Boston Herald comments upon the movement as a strange illustration of the way in which the imperial government practically fosters communistic tendencies; forgetting that tyranny and socialism have played into each other's hands since political organization was first attempted. We recollect seeing once in New York a procession of tailors on strike, who displayed the motto, "Government Protection and Assistance from the Cradle to the Grave," and have often subsequently heard the same expression from professed labor reformers. A more concise description of the régime which German despotism wishes to impose upon its subjects it would be hard to find, and it is not strange that souls too abject to help themselves should find the price of servitude, which tyrants impose upon their "protection," a trifling one to pay. It is not long since the very ideal of this "enlightened communism" existed in the southern portion of this country; the "protection and assistance" of the working people and their families by the governing class was carried to its utmost limit, and the dreams of the German political economists might have been realized if the slaves, more spirited or less philosophical than their white brethren, had not suddenly chosen to revert to the barbarian plan of shifting for themselves.

A PASSENGER railway has been recently constructed in Switzerland, employing the principle found so useful in some coal mines, of drawing empty cars up an incline by means of the superior weight of loaded cars descending. The Swiss line, which is intended to transport passengers from the landing place at Brienz to the top of the plateau from which the cascade of the Giessbach falls into the lake, forms a steep

incline, on which two wagons ply, attached to an endless cable of steel. No engine or other machinery is used to drive the cable, but in place of this a large tank is attached to each wagon, which is alternately filled with water at the upper station and emptied when the force of gravitation has brought it to the bottom of the slope; the same force which carries down the full one serving also to pull up the other. To save the expense of a double track, an automatic turnout is put in the middle of the road, the remainder of the line being used alternately by both cars, and as these cannot shift their relative positions on the rope, there is no danger of their coming into collision.

THE Brush electric light has been tried with a view to its use in the British House of Commons. Six globes were suspended a few feet below the ceiling, but the illumination proved too strong, and another experiment is to be made, with the lamps placed above the glass roof. The room is not a large one, having been purposely restricted in all its dimensions, so that the members might hear and see each other with the utmost possible facility. It is even said that provision was only made for about three-fourths of the proper number of members, on the supposition that at least a fourth would always be absent, and that the space they would occupy might as well be saved, to increase the comfort of the rest. Six electric lamps might therefore readily be supposed to furnish more light than would be necessary or desirable. It is time, we think, to invent a different sort of globe for such lamps. The ground glass ordinarily used is painful to the eyes, even over a gas flame, and infinitely more so when it shades an electric arc, while a large part of the light is wasted. A ribbed glass, which would disperse without intercepting the rays, or perhaps a double shade, filled with water, might answer. Both of these are used with gas, and are found pleasant.

THE singular blot in the perspective of Broadway at the corner of Houston Street, so long known as Murderers' Row, from the frightful crimes repeated year after year in the foul saloons which occupied its cluster of rickety shanties, is to exist no longer. The property has been rented for sixty-three years, on the pernicious system of ground-leases, and two iron stores are to be erected on the spot. Nearly opposite, another large building will soon be constructed, while on the corner of Prince Street and Broadway a third is already in progress. It is a long time since such extensive improvements have been undertaken on lower Broadway; most of the mercantile building having for a few years past been on the cross streets, particularly those adjoining the stations of the elevated railroads; but those who visit the city only on rare occasions will be glad to miss the shock which the sight of the squalor and crime of Murderers' Row, obtruded in the middle of the greatness and brightness of Broadway, never fails to give the stranger.

AN ingenious system of police alarms is now on trial in Chicago, and the results have thus far been so satisfactory that it is intended to establish it permanently in certain sections of the city. At frequent intervals, on the street-corners where practicable, "public alarm-houses" are erected, built of wood, and resembling a small sentry-box in shape and size. Keys to the houses are furnished to responsible citizens who apply for them, and when occasion arises it is only necessary to unlock the door, when by moving a lever attached to a signal-box inside the structure an alarm is given at the nearest station, which is answered in from one to three minutes by the appearance of three policemen and a horse and wagon, which serves either as an ambulance or a conveyance for prisoners, and is furnished with stretcher, blankets, handcuffs, and other apparatus for both purposes. In addition, a telephone from each house communicates with the station, so that help may be summoned, or descriptions of fugitive criminals given, with the least possible delay. To check the transmission of false alarms, the lock of the house is so arranged as to hold the key fast after opening, until released by another key, in the custody of the district patrol, which is applied on the reverse side of the lock. As each key is numbered, and a register is kept of the person to whom it is issued, the originator of any alarm, whether false or not, can be easily traced. Private police and fire alarms, resembling those so common under the "District Telegraph" system, will also soon be placed in the dwellings of those who desire them, on payment of their cost, thus giving a security which the inhabitants of other cities will regard with envy.

BUILDING SU

WHILE the workmen are it up, which may be desirable tions of the lot, it is necessary

the surface an up separately Disposal of Excavated Material. building oper subsequent

to see the earth from a edification, to be soon after show for some pier or post; then, over a third time, to cut a finally the greater part of barrows, and transported in for grading up in some place as well have been thrown in

Let the young superintendent likely to be used for grading can be most conveniently use, and to the least laborio The amount of material which may be estimated with very which will be needed for the there proves to be a surplus be arranged for disposing of lot, grading the approaches ments; and the earth may th to the place designated, and to be twice handled. When surface, loam must be piled in excavation.

The location of the aven necessary, should be determin plan which the superintendent

A large space on the most from the principal entrance, piling up timber, and for fr

Space to be Reserved for Materials. living stone and for other about the ma

These cares the extra expense and delay disposal of material must be paid conduct of such works is ind the superintendent, by his g perhaps, as his superior skill to foresee future contingencies suffer most by want of due

Applying these observations conditions to be as follows: the lot; and the ground slopi

Grading. for the entrance of the buildings will be of advantage in secu gutters during heavy rains.

hill, the ground rising contin necessary, in order to prevent reaching the walls, which it west front of the church suff in the reverse direction; an structure to have this grade form a plateau in front of enough to turn a carriage ea the south wall of the church south transept, forming a ter regaining the natural surface

The avenue crosses a small tean, and beyond it continues the sheds, which are situated separate foot-path from the st room and the society-room in

The gravel from the excavat for the plateau and terrace paths and avenues; and the side, where a deep soil is des It should therefore, as it is st tion, be piled in a heap south

It will be very advantageo the traffic of heavy teams br tage for the teams to have a instead of being obliged to go

Avenue Building. into a mass of is being strippi way should be

in front of the church, and material may unite with the ploughed, the loam taken off,

As fast as this is done, a eighteen inches wide and two throwing the gravel into the

a sacrifice will be made to retain the
C. E. ILLSLEY.

OWNERS' PROTECTIVE UNION, NO. 1.
ST. LOUIS, MO., Jan. 22, 1881.

Nos. 1, 2, and 3, of the above date,
being the advisability of demanding a
it was unanimously determined to ask
through the newspapers, notification
upon, as being most satisfactory to our
streets and ours are identical, we hope
approval, and that you will estimate
respectfully.

ROBERT STOFFEL,
SEBASTIAN MEYER,
HENRY SIEGELMEYER,
CHARLES EHLICHNER,
JOHN CASEY.

St. Louis exporters, on account of its
annoyance will be caused to the Union
again extent Mr. Illsley's fear that this
is so unsuccessful as to suggest a return
increased wages by unexpected
under the pressure of contracts, we
common-sense of Americans will in the
disposition to accomplish their ends by
men in foreign countries. We sympathize
Americans to secure the highest return for
and although they may have to learn that
even asking and obtaining the price which
set with a view to continuous profit will
men who have hitherto been too prone
children, dependent for their living upon
export from the world at large, than as
fect to the same laws, and bound to the
— EDS. AMERICAN ARCHITECT.]

ING FLOORS.

AMERICAN ARCHITECT.—
house containing a basement, store
on second, and tailor's shop on third
corner of the profession, be so kind
our valuable paper, what will be the
in the floor of third story, so that the
not heard through the floor in
s, one telling, the other for floor,
any.
Yours obediently, J.

ations is undoubtedly the most effectual
of sound through the floor, as it will
felt or mortar deafening will be the pre-
from the upper surface to the lower. He
occupants of the upper story, do some-
vibration of the sewing-machines them-
set on cushions of thick hair-felt, or
latter device has just been patented for
a lady in New York, who remembered
set his anvil in steel to diminish the
s ingenious enough to devise a mode of
is in a similar way. — EDS. AMERICAN

BUILDING.—The following original
case store, in New York, to be pulled
letter was presented by a lady of this
Washington to Dr. Wm. Thornton, one
said out the city of Washington. The
now known as the "Hillman House,"
near B Street: —

Thornton, Esq.,
Federal City.
MOUNT VERNON, Dec. 20, 1779,
the Bank of Alexandria for \$500 to enable
posed in laying in materials for carrying on
a building in Philadelphia of about the
given to my two houses which pleased me.
— doors in the centre — a pediment in the
of it in front — sky-light in the rear. If
architecture, I should be glad to have you
me request the favor of you to know from
it will be, I am, dear Sir, your most obedi-
— GEO. WASHINGTON.

Virginia City Enterprise says that they
d mountain mahogany, of a rich red,
for fuel it produces such intense heat
ly than any coal. It burns as long as
one becomes converted into a sort of
ordinary wood. A cord of this wood
coal.

Chronicle states that during the five
December there were 55,777 fires in
d that property valued at \$405,269,700
large loss the insurance companies lose
he number of fires in factories, work-
number of mills and shops, where lum-
on fire was 4,123. The loss in the
50 was \$74,828,000, being less than that
to same is true of Canada. The fact
to past year makes these figures more
turning up a city the size of Chicago
a sum which represents the work of

BUILDING INTELLIGENCE.

(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence
is provided by their regular correspondents, the editors
greatly desire to receive voluntary information, espe-
cially from the smaller and outlying towns.]

BUILDING PATENTS.

(Printed specifications of any patents here mentioned,
together with full detail illustrations, may be obtained
of the Commissioner of Patents, at Washington, for
twenty-five cents.)

- 27,945. BRICK-KILN. — William Barclay, Buffalo,
N. Y.
27,946. STONE-DRESSING MACHINE. — Thomas H.
Cook, Oswego, N. Y.
27,947. TRANSOM-VENTILATOR. — Henry C. Hart
and Thomas A. Bissell, Detroit, Mich.
27,947. SAW-SWAGE. — Patrick J. Hogan, Cin-
cinnati, Ohio.
27,948. ELEVATOR. — Joseph B. Johnson, Lynn,
Mass.
27,949. APPARATUS FOR TESTING PIPES AND
TUBES. — William S. McManus, South Chester, Pa.
27,950. PIPE-CUTTER. — John Miller, Cambridge-
port, Mass.
27,951. HOT-AIR FURNACE. — Matthew H. Rob-
erts, Philadelphia, Pa.
27,951. PIPE AND NUT WRENCH. — Lawrence
Glynne, Cambridgeport, Mass.
27,952. LADDER. — Lorenzo P. Teed, Erie, Pa.
27,953. HOT-WATER HEATING APPARATUS. — Ed-
ward Backus, Rochester, N. Y.
27,954. SAND POINT FOR WELLS. — Charles L.
Halstead, La Crosse, Wis.
27,955. LOCK. — Ekins Hand, Rochester, N. Y.
27,956. DRAUGHT DEVICE FOR CHIMNEYS. — James
Hietabothem and Harry M. Doubleday, Brooklyn,
N. Y.
27,957. STOVE-PIPE THIMBLE. — William L. Lead-
er, Monmouth, Ill.
27,958. DOOR-KNOB. — Sam'l Russell, Shepherds
Bush, England.
27,959. FASTENER FOR MEETING RAILS OF
RAILROADS. — William Sibbery, Washington, D. C.
27,960. VENTILATOR FOR CHIMNEYS. — Ezekiel
Van Noorden, Boston, Mass.
27,961. BIT-STOCK AND SHANK. — Oscar G. Stratton,
Greenfield, Mass.
27,962. COOLING DRAINAGE. — John Wilkinson, Har-
vard, Ill.
27,964. BRAKE FOR ELEVATORS. — Felix F. Candell,
Boston, Mass.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS. — Twenty-one building permits
have been issued since the last report the following
only being of sufficient importance to be men-
tioned.
W. F. Gilbert, 2 three-story brick buildings, on Cal-
houn St., near Lombard.
John Wheeler, three-story brick building on Rich-
mond St., between Howard and Cathedral St.
Henry Mohrman, 3 two-story brick buildings on
Bethel St., between Eastern and Canton Aves.
James D. Mason, 2 five-story warehouses on Pratt
St., near Charles.
Edward J. M. Miller, 2 two-story brick buildings on
Charles St., near Windsor.
James Patterson, three-story brick building, n w
cor. Broadway and Eager St., 30' x 60'.
Christian Wiegand, three-story brick building on
Druid Hill Ave., near Preston St.
James Haswell, three-story brick building on Ox-
ford St., between Druid Hill and Pennsylvania Ave.
Newbold & Sons, four-story warehouse on Hanover
St., between Pratt and Lombard Sts., 31' x 115'.
Messrs Geo. Siemens & Co. have awarded the
contract for the erection of their new factory on W.
Pratt St. to Messrs. S. H. and J. F. Adams.
The factory to be 60' x 100', three-story high, of brick,
Mr. Chas. L. Carson, architect.
Henry Hellman, three-story brick building on
Stricker St., near Freeman.
Caleb Warfield, three-story brick building, n w cor.
Werner St. and Burgundy Alley.
Messrs. Messrs. Dixon & Kennedy have in hand
several residences in Baltimore County for Mrs.
Hastely, near Lake St. Item, J. J. Nicholson, near
Shawwood, and two at Mt. Washington, one for Mr.
New Hotel.
Subscriptions are now being received
at Cumberland, Md., for the erection of a new hotel
to be built at Frostburg, Md., to cost about \$20,000.
New Hotel. — Work has commenced on the new Mount
Vernon cotton duck mill, and is being pushed for-
ward rapidly. The building is to be 52' x 120', three-
story high, with a picking-house 45' x 80', three-
story. The work will be done under the management
of Mr. Albert H. Carroll. The building when com-
pleted will cost with the machinery about \$400,000.
New Factory. — Work on two large canning fac-
tories at Westminster, Md., will be commenced as soon
as the weather will allow.
New Church. — The Episcopalians of Gaithersburg,
Md., have purchased a lot of ground, and are about
to commence the erection of a new church edifice.
about to build two warehouses on Howard St., be-
tween German and Lombard, each 25' x 110', five-
story and basement, the fronts to be of iron and brick,
brick finish, to cost about \$50,000; Mr. Jackson C.
Gott is the architect.

Boston.

BUILDING PERMITS. — Brick and Stone. — 29 Drimmer
St., for Chas. F. Fickett, dwell., 20' x 72', three-
story; Thos. J. Whidden, builder.
Granite, near Richards St., for Standard Sugar
Refining Co., boiler house, 30' x 39'; Standard Sug-
ar Refining Co., builders.
205 Newbury St., for Silas W. Merrill, dwell., 32'
x 50', three-story, mansard; Silas W. Merrill, builder.
207 and 209 Newbury St., for Silas W. Merrill, 2
dwell., 24' x 50', three-story and mansard; Silas W.
Merrill, builder.
Wood. — Raymond St., near Lamartine St., for
Patrick Murphy, dwell., 22' x 30', three-story; John
L. Lakin, builder.
Centre St., near Lagrange St., for Geo. K. Guild,
carriage-house, 34' x 20'; Anson H. Waterman;
builder.
We hear of numerous building contracts for the
early spring, mostly of dwelling houses on the Back
Bay lands.
CADET'S ARMY. — It is announced that during the
past year \$20,000 have been subscribed toward build-
ing a new armory for the corps. As has already been
announced, the building, to be an elegant one cost-
ing \$150,000, will probably be located on Columbus
Avenue, where the site of Paris building stood.
Plans will soon be decided upon, and the work of
erection will probably soon be commenced.

Brooklyn.

BUILDING PERMITS. — South Tenth St., Nos. 63 and
65, n s, abt 77' x Third St., 2 three-story brown-stone
dwells., 18' 9" x 42'; cost, \$4,500 each; owner, John
M. Stearns, 140 Fourth St.; architect, Jas. Barrett;
builder, Win. Biss.
Warren St., n s, 103' 6" x Columbia St., four-story
brick tenement, 23' 1" x 65'; cost, about \$6,000;
owner, Peter McKee, cor. Amity and Columbia Sts.;
architect, Fred. E. Lockwood.
Washington Ave., e s, 95' x Dekalb Ave., three-story
brick dwell., 25' x 78'; owner, Chester B. Lawrence
27 Dean St.; architect, M. J. Morrill; builders, G.
Cameron and J. S. McKee.
South Second St., n s, 100' x Second St., four-story
brick tenement, 25' x 67' 6"; owner, Mary O'Connell;
architect, Thos. F. Houghton; builders, Jas. Rooney
and Francis G. Turner.
Hope St., n s, 75' x Sixth St., rear, three-story brick
factory, 24' x 80'; cost, \$8,000; owner, James Kava-
nagh; architect, W. H. Gaylor; builder, Thos. Gib-
son.
ALTERATIONS. — Fifth St., e s, bet South Third and
South Fourth Sts., new tier of beams, etc.; o at,
\$2,000; owner, Joseph Beechey, Sixth St., near Grand
St.; builders, A. Hayes and S. Hough.
First Pl., No. 115, one-story brick extension, 10' 6"
x 14' 3"; cost, \$3,500; owner, Charles Morningstar,
119 First Place; architects, Parrot Bros.; builders,
S. Rippingale and Morris & Selover.
Fulton St., Nos. 70 and 72, asphalt roof, also one-
story brick extension, 19' 2" x 18' 8" and 19' x abt 40',
asphalt roof, iron work, etc.; cost, \$4,000; owners,
Geo. Pool & Sons, on premises; architect, George
Chapelli; builder, W. Irvington.
HOSPITAL. — Land has been given by George J. Seney,
in connection with the sum of \$300,000, to found a
hospital in Seventh Ave., running from Union to
President St., within two blocks of Prospect Park.
It has not been decided whether the building will
be placed there or in some other location.

Buffalo.

DEPOT. — The N. Y. Central & Hudson River R. R.
will rebuild that portion of their depot destroyed by
the falling of the roof on the 8th ult. The addition,
120' x 60', will consist of an extension of the present
train room. The plans were prepared by the en-
gineer of the road.
STORES. — Plans have been prepared by Mr. Geo. J.
Meizer for two stores on Main St., near Genesee
St., having a frontage of 63' on Main St., and 83' on
Washington St., to be of brick, with Ohio sand stone
finish; owners, Messrs. Irlbacher & Davis and F. J.
Hundel; cost, \$35,000.

Chicago.

BUILDING PERMITS. — G. Tawfer, two-story brick
dwell., 3639 Wentworth Ave.; cost, \$3,000.
E. T. Harris, four-story brick factory, 60' x 80',
Monroe and Desplaines Sts.; cost, \$15,000.
C. Paget, brick theatre, 72' x 134', Sedgwick and
Division Sts.; cost, \$20,000.
J. W. Doane, two-story brick dwell., Prairie Ave.,
near Eighteenth St.; cost, \$10,000.
E. Dwyer, three-story brick store and dwell., 18' x
48', 353 Kinzie St.; cost, \$1,500.
Union Shoe Co., two-story brick factory, 40' x 100',
Halstead St., and Webster Ave.; cost, \$10,000.
G. W. Lucke, three-story brick dwell., 30' x 54',
1011 North Clarke St.; cost, \$5,500.
James Breglia, two-story brick dwell., 20' x 66',
Eighteenth St., near Blue Island Ave.; cost, \$6,000.
Simon E. Beers, two-story brick dwell., 21' x 34',
Honoré St., near Thirty-Fifth; cost, \$5,000.

New York.

BUILDING PERMITS. — Fifty-First St., s s, 100' 3" x
Ninth Ave., five-story brick apartment-house, 38' 6"
x 100'; cost, \$25,000; owner, Charles Gahren, 346
West Fortieth St.; architect, Joseph M. Dunn.
Fulton Ave., w s, 100' x One Hundred and Sixty-
Ninth St., two-story frame dwell., 24' x 31' 6" x 40';
cost, \$5,000; owner, Louis Koch, on premises; archi-
tect, Julius Kanner.
Monroe St., No. 158, six-story brick factory, 23' 1"
x 95'; cost, \$12,000; owners, M. and H. Schrenkelsen,
s w cor. Canal and Elizabeth Sts.; architect, F. W.
Klement; builders, Murphy & McIntyre.
East Twenty-Fifth St., No. 22, four-story brick
dwell., 25' x 61'; cost, \$22,000; owner and architect,
Edward H. Kendall, 71 Broadway; builders, Marc
Edlitz and Chas. F. True.
West Fifth Avenue, No. 132, five-story brick flat, 25'
x 81' 2"; cost, about \$20,000; owner, James F. Wood-

house, 106 Broadway; architect, R. N. Anderson;
builders, John Bannen and Steele & Costigan.
Stanton St., No. 253, five-story brick tobacco fac-
tory, 25' x 100'; cost, \$14,000; owner, Mrs. G. B. Mil-
ler & Co., 97 Columbia St.; architect, W. Wheeler
Smith.
Fifty-Sixth St., s s, 275' x Ninth Ave., six-story
brick apartment-house, 50' x 85'; cost, \$60,000; owner,
Herman Hofer, 418 West Fifth St.; architect,
Thos. & Wilson.
Ave. A, n e cor. Twenty-Second St., three-story brick
factory, 30' x 49' 5"; cost, \$4,000; owner, Brewster
entice, 54 Wall St.; architects and builders, C. W.
Klappert & Sons, and L. Johnson.
East One Hundred and Twenty-Third St., No. 167,
rear, three-story brick shop, 21' 6" x 27'; cost, \$2,500;
lessee, Charles Schneider, on premises; architect,
W. Graul.
Seventieth St., foot of, at East River, one-story frame
shooting gallery, 30' x 69' 6"; cost, \$5,000; lessee,
Emma C. Gent, foot of Sixty-Ninth St., East River;
architect, Julius Kanner.
ALTERATIONS. — New Church St., Nos. 60 to 68, repair
damage by fire; cost, \$2,577; owner Western Union
Telegraph; builder, E. Smith.
Elm St., Nos. 115 and 117, raised one story; cost,
\$3,500; owner, Fred. Hollender; architect, Wm.
Kuhles; builder, not selected.
Washington Ave., e s, 242' x One Hundred and Six-
ty-seventh St., partitions, etc.; cost, \$4,000; owner,
E. F. Bacon; architect and builder, Louis Falk.
Lexington Ave., No. 52, two-story brick extension,
24' 8" x 51', tin roof, brick and iron cornice and in-
terior alterations; cost, \$4,000; owner, Columbia
Club, on premises; architect, F. Kafka; builder, not
selected.
Broadway, No. 1293, cor. Thirty-Third St., interior
and front alterations; cost, \$2,500; owner, Thom-
as A. Lawrence, Coleman House; architect and builder,
W. L. Goetschius.

FLATS. — Mr. Henry I. Dudley, late Superintendent of
Buildings, 1153 Broadway, has prepared plans for
French flats on Twenty-Seventh St., on the old
Ingersoll property, between Seventh and Eighth
Aves. The building will be 90' x 175', of brick and
stone. Cost will be about \$200,000. Mr. P. Draper
is associated with Mr. Dudley in the construction.
The ground is now being cleared, and work will be
commenced very shortly.
On Fifty-Eighth St., east of Tenth Ave., French
flats, 125' x 80', are to be erected from designs of Mr.
Henry J. Dudley. The building is to be of brick and
stone, and will cost about \$150,000, independent of
the lots. Portions of the work are already contracted for.

On Fifty-First St., between Eighth and Ninth Aves.,
flats to be of brick with Ohio stone trimmings, 38' 6"
x 85' are to be erected from designs of Mr. Jos. M.
Dunn, at a cost of about \$25,000.
The same architect will alter the dwelling on
Fourth Ave., between Twenty-Ninth and Thirtieth
Sts., into flats, at a cost of \$10,000.
FULTON MARKET. — The present improvements, which
will cost \$80,000, are under the superintendence of
Mr. Douglas Smyth, architect.
STORES. — On Broadway we hear of several stores to
be built after May 1st. On Leonard St. one is to
be built from designs of Mr. T. M. Clark, of Boston.
At No. 81 White St. a store is to be erected from de-
signs of Mr. Chas. C. Haight.

WAREHOUSE. — On the corner of West Broadway and
Franklin Sts., a warehouse about 100' square is to be
built from designs of Mr. Geo. W. Da Cunha.
WALLACE'S THEATRE. — Mr. Geo. A. Freeman, Jr.,
has finished the plans for the new Wallace's Theatre,
n e cor. Broadway and Thirtieth St. The building
will be of brick, terra-cotta and stone. The height
will be 60'; size, 75' x 110'; seating capacity about
1500; there will be 10 private boxes. Cost is esti-
mated at \$100,000.

APARTMENT-HOUSES FOR BACHELORS. — Mr. G. A.
Freeman, Jr., has drawn the designs for the apart-
ment-house which is to be built on the corner adjoin-
ing Wallace's Theatre, and above its lobby on Broad-
way. The cost of this will be about \$200,000. The
front will be incorporated with that of the theatre,
and the two buildings will cover 100' 4" on Broad-
way, and 122' on Thirtieth St.
ENGINE-HOUSE. — A fire and hook-and-ladder house,
30' x 100', of brick and stone, is to be built by the city
at a cost of \$15,000.

CITY WORK. — On the dock of Bellevue Hospital
grounds a pavilion, 40' x 60', for erysipelas patients,
is to be built of corrugated iron, fire-proof floors, at
a cost of \$8,000. On the grounds the Marquand Pa-
vilion, of brick and terra-cotta, to accommodate 60
children, is to be built at a cost of \$18,000 of those
suffering from children's diseases.

In connection with the hospital a new water-closet
tower is to be built at a cost of \$15,000.
A new east wing to the insane asylum on Ward's
Island, of brick and Ohio stone, to cost \$100,000, is
to be built.

On Blackwell's Island an addition to Retreat
Building, to be of brick and stone, is to be built at a
cost of \$40,000.

On Hart's Island a new pavilion, to be of brick, to
cost \$20,000, and a laundry, kitchen, and boiler-
house, also of brick, to cost \$15,000, are to be built.
On Randall's Island a pavilion, brick and stone, for
children, is to be built at a cost of \$20,000.
On Blackwell's Island a pavilion and almshouse
for old men is to be erected at a cost of \$18,000; and
an addition and alterations to kitchen, laundry and
engine-house of inmate asylum will cost \$25,000. All
from designs of Mr. Jos. M. Dunn.

Philadelphia.

BUILDING PERMITS. — Twenty-First St., cor. Summer
St., three-story dwell., 18' x 50'; Thos. E. Sheldrick,
contractor.
South Third Ave., south of Bainbridges, two-story
dwell., 35' x 58'; Chas. B. Reese & Co.
Arch St., between Twentieth and Twenty-First
Sts., three-story dwell., 18' x 80'; H. G. Harris,
owner.
Branch St., north of Mill St., above Branchtown,
2 three-story dwell., 13' x 46'; J. P. Spicer, owner.
(Continued on next page.)

BUILDING INTELLIGENCE.

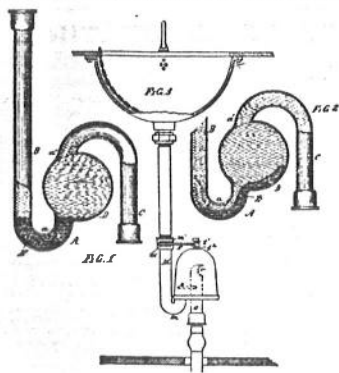
(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for (invents-five cents).]

237,262. **MERCURY-SEAL FOR STENCH-TRAPS.**—Joseph Benner, Philadelphia, Penn. This invention provides a mercury-seal joint for traps, being so constructed that it will open readily under direct downward pressure, but will close again on upward pressure. The improvement consists, essentially, in a trap which holds mercury in such manner that it normally forms a seal-joint, opens readily without loss or waste of mercury under fluid-pressure, closes automatically, and elongates itself in a solid vertical column against back-pressure from sewer-gases. Figures 1 and 2 show the principle and the simplest form of construction of such a trap. A shows a S-trap, in which, above its lower bend, a, and on the side adjacent to the other pipe, C, is a chamber, D. E represents the mercury-seal in the trap. When water is



sufficient quantity to overbalance the mercury is admitted to it, the mercury will be forced in sufficient quantity into D to open the joint and permit water to pass through the trap, the mercury spreading over the bottom of the chamber, and by reason of the enlarged area of the chamber relatively to the neck of the trap leaving ample space above it for the passage of the water. When the water has been discharged sufficiently to restore equilibrium the mercury will return to the bend, a, of the trap, having then a body of water above it in the pipe, B, and another body in the arm, a, of the trap.

237,262. **FIRE-PROOF BUILDING.**—Joseph Gilbert, Philadelphia, Penn. Figure 1 is a side elevation of a span embodying this invention. This invention consists of metallic lathing connected to the beams of buildings, so that when the plaster is applied a level ceiling is formed and the beams are protected from the direct action of fire, the invention being also applicable to partitions, the connection of the lathing to the beams being by means of hangers which are suspended from the beams, and have base-strips which support the lathing. A represents I for flanged beams or girders for buildings. B represents metal hangers, which are suspended from the lower flanges of the beams, and to them are connected metal cross-strips, C, on which are placed and secured longitudinal slats, D, of metal, and the upper embracing portions, the hangers, are held in position by the skewbacks, E, and



spaces exist between their lower portions and the bases of the beams, for the reception of the strips and slats, C, D. If desired, transverse strips may be connected to the slats, D, at places intermediate of the hangers, and may be intercrossed with the slats, or iron work is produced for their stead, so that proper opening is effected for plastering purposes. When the plaster is applied it is effectively keyed by the slats, is level and secure throughout. Or the invention may be applied to partitions, in which case the parts are produced possessing all the advantages of the ceiling, the bottom of the lower flanges of the beams are covered by and sheathed with the plaster, so that fire is prevented from reaching and acting upon the beams.

238,222. **LUMBER-SORTER.**—Evan T. Davies, Manchester, Mich.
238,223. **SUPPLEMENTAL PLATE FOR FURNACE REG-**
238,224. **VENTILATING OR COOLING BUILDINGS.**—Elizabeth E. Rice, Washington, D. C.

238,250. **MACHINE FOR DRESSING WOOD, STONE, ETC.**—Nicholas Jenkins, New Haven, Conn.
238,252. **MACHINERY FOR DRESSING AND SHAPING WOOD, STONE, ETC.**—Nicholas Jenkins, New Haven, Conn.

238,259. **BLIND-SLAT ADJUSTER.**—Oliver Plerson and Alexander H. Hill, Okaloosa, Iowa.
238,310. **SLIDING-DOOR HANGING.**—Edwin Prescott, Hampton Falls, N. H.

238,323. **HINGE.**—Ephraim G. Adams, New Haven, Conn.
238,327. **TOOL-HOLDER.**—John F. Allen, New York, N. Y.

238,341. **COMPOUND FOR PRESERVING WOOD.**—Wm. W. Bunnell, Thomasville, Neb.
238,343. **COMBINATION WRENCH.**—Edward M. Butler and W. H. Campbell, Cleburne, Tex.

238,363. **WRENCH.**—Bernard Donoghue, Yonkers, N. Y.
238,376. **CORPLING FOR PIPES.**—John M. Foeter, Philadelphia, Penn.

238,417. **BAY-WINDOW.**—Willis S. Garrison, LaPorte City, Iowa.
238,438. **DOOR-BELL.**—Joseph W. Johnson, New Britain, Conn.

238,453. **WATER-SUPPLY FOR CRUISES.**—Chas. H. Roberts, Evansville, Ind.
238,442. **KITCHEN-BUILDER.**—Geo. Salmon, Taunton, Mass.

238,453. **WATER-CLOSETS.**—Jas. H. Spencer, Philadelphia, Penn.
238,460. **FIRE-ESCAPE LADDER.**—Seymour Torrance, Hadley, Mich.

238,462. **SASH-FASTENER.**—William Tyler, Georgetown, D. C.
238,469. **APPARATUS FOR HEATING BUILDINGS.**—Edwin A. Wood, Utica, N. Y.

9,590. **DAMPENING REGULATOR FOR FURNACES.**—(Re-issue.) Daniel C. Kellera, Detroit, Mich.

SUMMARY OF THE WEEK.

Boston.

BUILDING PERMITS.—Brick and Stone.—Endicott St., for Michael J. Barr, stable, 40' x 60', three stories; Otis Wentworth, builder.

East Dedham St., for Baldwin & Emerson, storage, 22' x 88', three stories; H. J. Bartlett, builder.

Wood-Chelsea St., No. 97, for Patrick Hughes and Mary O'Donnell, dwell. and store, 22' x 50', two stories and mansard; Archibald Macaulay, builder.

Orchard St., near Boston St., for Stephen Clapp, dwell., 21' x 28', two stories; Wm. Eades, builder.

Monadnock St., near Bird St., for Wm. H. Saywood, dwell., 22' x 32', two stories; Wm. H. Saywood, contractor.

Shurtleff Court, near Rutherford Ave., for Frank H. Wellington, stable, 33' x 80', three stories.

East Sixth St., for Patrick Coyne, dwell. and store, 20' x 20'; Geo. Thomas, builder.

Country St., near Dorchester Ave., for Sumner Crosby & Son, storage, 30' x 40'; Esterbrook & Ferguson, builders.

Monadnock St., near Bird St.; for Wm. H. Saywood, dwell., 22' x 32', two stories; Wm. H. Saywood, builder.

Chelsea St., near Eagle St., for T. Brigham Bishop, building for refining precious metals, 50' x 50'; Edw. C. Cobill, builder.

Bellevue Ave., cor. Rosindale Ave., for August Mann, dwell., 21' x 30', two stories; John String, builder.

Duff St., near Poplar St., for Chas. Mosca, dwell., 23' x 30', two stories; Alexander Rogers, builder.

HOUSE.—A house is to be built this spring for Mr. Chas. A. Kidder, on Commonwealth Ave. It will be a brick-and-stone front, four stories high; Messrs. Allen & Kenway, architects.

Baltimore.

BUILDING PERMITS.—The following building permits have been issued since the last report:—

Chas. Rein, three-story brick building on Lexington St., between Charles and Liberty Sts., 20' x 74'.

Amanda Black, three-story brick building, s e cor. Fulton Ave. and Lexington St., 35' x 45'.

John Q. Codling, 20 three-story brick buildings, on Hanover St., near Randall St., nineteen 12' front, one 14' front.

John Q. Codling, 21 three-story brick buildings, on Hanover St., between Heath and Barney Sts., two 16' (each) front, twenty-five 12' (each) front.

Frederick St., between Baltimore and Second Sts., 16' 6" x 44'.

Benj. F. Smith, 7 two-story brick buildings, on Hull St., near Fort Ave.

Francis White, 7 three-story brick buildings, on John St., between McMeichen and Wilson Sts.; two 16' 6" and five 16' 6" front (each).

Wm. Shirley, three-story brick building, on German St., between South and Calvert Sts.

Geo. W. Gill, three-story brick building, on Madison Ave., between Biddle and Orchard Sts.

Chas. Shipley, three-story brick buildings, on Federal St., between Cathedral and Oliver Sts.

Wm. Fifer, 4 three-story brick buildings, on Oak St., between Oliver and Federal Sts.

Chas. Shipley, three-story brick building, s e cor. Stretter and Fremont Sts.

Thirty-three permits issued for the week.

WAREHOUSE.—Mr. Frank E. Davis, architect, of this city, is preparing drawings for a new warehouse for Mr. Ensminger, of Harrisburg, Penn., to be of brick with stone, terra-cotta, and moulded brick finish, 60' x 60', five stories and basement; cost, \$18,000.

Mr. James D. Mason is building a large five-story brick warehouse, on Pratt St., near Charles St., on the site recently occupied by Nos. 155, 157 and 159. The work will be done under the supervision of Mr. E. W. Robinson.

GRAIN ELEVATOR.—The Union Elevator Company, recently organized in this city, have begun to work on the details of a grain elevator, which will be of 250,000 bushels capacity.

HOSPITAL, ETC.—Work on the Johns Hopkins Hospital buildings, North Broadway, will be resumed this week, and from 300 to 400 men will be employed about the grounds in masonry work, excavating, etc. **OTHER WORK.**—Work will also be resumed on the new Baltimore & Ohio Railroad building, and the Chamber of Commerce buildings this week, the severe weather having been the cause of the suspension.

Brooklyn.

BUILDING PERMITS.—South Ninth St., No. 176, three-story brick tenement, 21' x 58', tin roof, iron cornice; cost, \$11,000; owner, L. Friedman, 238 South Fourth St.; architect, Wm. Jose; builder, James Rodwell.

South Ninth St., No. 174, three-story brick dwell., 21' x 58', tin roof, iron cornice; cost, \$13,000; owner, L. Friedman, 238 South Fourth St.; architect, Wm. Jose; builder, Jas. Rodwell.

Orient Ave., n s, 150' x Bushwick Ave., two-story frame dwell., 19' x 38'; cost, \$2,000; owner, John Williams, Maspeth Ave.; architect, John Mumford; builder, F. F. Williams.

Boerum St., No. 167, three-story frame tenement, 22' x 30', tin roof; cost, \$3,300; owner, etc., Joseph Herte, 163 Boerum St.

Graham Ave., w s, 75 n McKibbins St., three-story frame tenement, 16' 8" x 45'; cost, \$5,000; owner, Mrs. Sarah J. Bergen, 201 Montague St.; builder, John H. Gallaher.

Eleventh St., n s, 210' x Sixth Ave., 4 two-story and basement brick dwell., 18' 8" x 45'; owner, Mrs. Sarah J. Bergen, 201 Montague St.; builder, John H. Gallaher.

Dobbin St., No. 154, two-story brick dwell., 20' x 29'; cost, \$3,000; owner and architect, D. W. L. Moore; builder, J. H. Whittier.

St. Johns Place, n s, 124' x Sixth Ave., 3 three-story brownstone dwell., 16' 8" x 45'; cost, \$5,000; owner, etc., Thomas Green, 185 Sixth Ave.

Tompkins Ave., n e cor. Stockton St., 3 three-story frame tenements, 21' 8" x 44'; cost, \$3,200 each; owner, etc., George Loeffler.

Alterations.—Monteith St., n e cor. Bremen St., add one story, 2 two-story frame extensions; cost, \$2,800; owner, J. Kerschendeiter; builder, George Loeffler.

East St., No. 251, raise roof; cost, \$3,000; owner, Eliza J. Smith, Brooklyn Ave. and St. Mark's Place; builder, O. K. Buckley, Jr.

Grand St., No. 383, two-story brick extension, 13' x 17'; cost, \$2,400; owner, Mr. Bear, on premises; architect and builder, C. L. Johnson.

Buffalo.

HOTEL.—Work has just been commenced on Dr. Cary's hotel, mentioned in these columns some months ago. An entire new set of drawings was prepared, to cover an irregular-shaped corner lot, with a total frontage of 178'. The building is to be six stories in height, and will be built of brick and buff Ohio sandstone. The hotel will contain 125 bedrooms, and is estimated to cost about \$150,000. The plans were prepared by Richard A. Waite, architect.

SANATORIUM.—Dr. R. V. Pierce, the owner of the unfortunate Palace Hotel, has published a letter announcing his intention not to rebuild the hotel as such, and although he avers his intention of building a sanatorium for the use of his patients, leads us to infer that it may not be upon the hotel site.

Chicago.

BUILDING PERMITS.—W. Gill, two-story brick dwell., 21' x 40', 68' Ashland Ave.; cost, \$3,000.

M. Hught, two-story brick dwell., 39' x 67', 2830 Prairie Ave.; cost, \$2,000.

Jonathan Clark, four-story brick store, 30' x 138', 145 State St.; cost, \$25,000.

G. W. Brown, two-story brick store and dwell., 25' x 56', 318 State St.; cost, \$3,000.

J. Carbutt, 2 three-story brick dwells., 43' x 60', Tremont and Congress Sts.; cost, \$8,000.

M. W. Wolf, two-story brick store and dwell., 23' x 67', 3150 Wabash Ave.

W. Loor, two-story brick store and dwell., 24' x 65', 3419 North St.; cost, \$4,000.

J. Schwerin, two-story brick store and dwell., 25' x 68', Superior St.; cost, \$4,700.

J. Persha, two-story brick dwell., 20' 8" x 54', Nineteenth St.; cost, \$3,000.

V. Mrazek, same, 21' x 60', Eighteenth St.; cost, \$3,000.

H. Harth, same, 20' 8" x 68', Newberry Ave.; cost, \$4,100.

H. F. Wait, 3 three-story brick stores and dwells., 22' x 40' each, Clark and Twenty-Second Sts.; cost, \$12,000.

W. W. Welles, two-story, same, 22' x 36', 384 Oakley Ave.; cost, \$2,600.

Mobile.

STORES.—At s e cor. Government and Royal Sts., 2 three-story brick stores, 53' x 83', fronts faced with Mobile front brick, with finish of cement, cast-iron and galvanized-iron; cost, \$14,500; owner, Mrs. E. J. Mauser; builders, C. Farley and L. Morrison; architect, Jas. H. Hutchison.

SAWMILL.—On Bayou Marmot, at head of Water St., two-story frame building, dimensions, 60' x 150'; owners, March & McDonald; builders, Jourdan & Hand; cost, \$15,000.

DWELLING.—At south-east corner Spring Hill Shell Road and Pine St., one-story frame dwelling; cost, \$200; owner and builder, John Z. Baillif; architect, Jas. H. Hutchison.

RESTAURANT.—At corner of Royal and Conte Sts., the old Post Office Restaurant, lately known as the Academy of Music, is being repaired and re-modelled at a cost of \$1,400; owner, A. Phillips; contractor, M. Smith; architect, Jas. H. Hutchison.

New York.

BUILDING PERMITS.—Third Ave., w s, 237' x One Hundred and Sixty-Seventh St., one-story frame store and dwell., 22' x 52'; cost, \$2,500; owner, Miss Rabe, 120 Third Ave., near One Hundred and Sixty-Seventh St.; architect, Louis Falk; builder, J. McGerity.

West Broadway, Nos. 108, 110, 112 and 114, and Nos. 126, 128, 129 and 130 Franklin St., and Nos. 4, 6 and 8, n e cor. Park St., nine-story brick grocery

(Continued on next page.)

BLASTING.—It appears that at some y, in Yorkshire, England, there is a water is used in addition to gunpow-
The system is simple in the extreme, is an economy, for, in the blasting in conjunction with gunpowder, a considerably less powder and the fine of the foregoing will be best ap-
the operation. Ordinarily, blasting follows: A bore-hole is made in the diameter and four or five feet deep, inserted, with a slow fuse attached; say, it is filled with any available is lighted and the cartridge fired. erous in fiery pits, is created, and and smoke are generated. Blast-
performed in the following manner: er-cartridge, with fuse attached; ed into the bore-hole a tube con- as large as the bore-hole will ad- longer the better. They may be terial—thin tin-plate or of stout en roller and pasted together, the e is then tamped, the fuse lighted
The result of this operation may er, in exploding, bursts the tube e of the powder is extended through ples of hydraulics, demonstrated rged interior area of the bore-hole, water-tube. A much larger quantity a smaller quantity of powder; the e powder and the gases converts a elastic force of which assists in the d water together put out the flame and neutralize the greater portion on the explosion. It will readily be onomy and safety by the adoption e, and it is to be hoped that, in the e and intelligent coal owners will on in their present crude and danger- tend, in a great measure, to make ex-
the past, rather than of almost daily

RISK.—At the close of the obelisk eitan Museum of Art, a letter was eoming the following statis-
the ol
—
transport, and erecting the \$73,844.03
supporting, placing and repair- 28,732.00
—
—
and expenses of the steamer, which
The word "expenses" is used to
been paid for the use of the money
these amounts aggregate \$15,973.03.
cost, the actual cost of lowering and
for water and 11,520 feet by land, and
and its pedestal and base is \$35,603.
in the port of New York, Mr. W. H.
\$5,000 in three instalments towards
carrying on the work. On February
y, \$40,000, making \$103,732 in all.
ry of the gentlemen who advanced
er and gave her up to me without
supporting the obelisk, pedestal and
re and are clearly entitled to all the
scale, in return for their pluck and
ish what I undertook. From their
and nothing but their personal friend-
to take such a risk.

—The following letter is one of the eation of Barnsley (Eng.) for the ap-
its reading at Tuesday's meeting
not great mirth—"January 15, 1881.
candidate for Borough Surveyor of
ence as builder in cheap and jerry line,
ders, and would see good property was
ing in Sheffield now does not pay, so
2 accept post of Borough Surveyor
creasing town, which I have visited
agrees me, also with my wife and five
ears old. I would give the whole of
ept £200 until you discovered my
you would give me the full salary. I
ding firm until I went into the jerry
I have done very well, but Sheffield is
will look after your important town
tricks. I can wait on you any day
me, and will give you reference to
me. H—W—"

ning the interesting discoveries made
mission is that of a large city called
covered with the sand of the desert.
he Wed Wya, and near it in former
which afforded water for very large
cted that with some labor the walls

save their cities from destructive necessary precautions. In the streets ink, which are called Taiping-tseung, and contain abundant supplies of a stone slab is placed, which is only used in case of fire. It is provided in various parts of a Chinese city full of water. On the sides of these streets, the words, "peace tube," or also it is not unusual for the Chinese to carry water, so that they may always have it to suppress incipient fires. The fire-brigades, maintained entirely by the city. The fire-engines, water-buckets are kept, as a rule, in the different districts, and distinguished by a peculiar emblem of the guild. The officers and men, with a distinctive uniform, or dress, and Chinese characters, the name or words, "Kow-fu," or fire-extinguisher, are members of the local government of the city. By way of illustration, the magistrate of this city has in his office, on the occasion of a fire, to suppress, or commandant of the Chinese fire-brigades, eighty men, of whom one hundred are stationed in the western suburb. The Governor there are two hundred men, consists in helping firemen to subvert the city of Canton there are forty-eight men, in the event of a fire, two men.

At the close, or commencement, of the year, the provincial judge and whom are very high officials, are appointed servants whose duty it is to assist with the view of making all Chinese these duties, it is enacted that, in the event of fire, all the officers of the city shall be degraded in rank one step; if being destroyed, the matter shall be sent at Pekin. A few days after a consecutive fire-brigade which was present knowledge of their good services, and sums of money. The men to whom the Chinese fire-brigades are attached to the extra rewards. Wounded firemen are of their wounds. The Chinese firemen. They very quickly arrive, they are most prompt in extinguishing during. During the late war between Canton was set on fire by bombs, I observed from the top of the fire-brigades steadily persevering in the face of a constant fire of shot and

the celebrated Egyptologist, who at Boulogne-sur-Mer in 1821. In the this native town the study of Egyptian possessed very few books to guide him in the study of the principal difficulties to be overcome was chiefly instrumental Champollion of the Institute of France, the Egyptian Museum of the Louvre, valued, was charged with a scientific of searching out and examining the the convents; but scarcely had he been drawn to ancient Memphis, whose ruins near to the pyramids. Assisted by authors of antiquity, he began excavations, the sanctuary of the god Serapis, all as other archaeological remains of four years in the midst of the desert Memphis, at Abidos, and at different. He unearthed the famous colossus known, in a natural rock at the foot of light a number of bas-reliefs, inscriptions. On his return to France, of the excavations in the valley of the Nile. We owe to him the unearthing of the edict of Amenhotep, and also the foundation of the temple of Karnak, where he has been engaged during the valuable objects which have been found, and skill. In 1873 the Institute of prize of 20,000 francs. For some years much much affected, and it may be said of his devotion to archaeology.—The

TIMBER.—Fourteen years ago a Mr. placed two gate-posts of white-oak in which were set the bored into the top of a hole three inches deep, filled it with it, and covered the posts. Having the posts, he found them as they were planted.

BUILDING INTELLIGENCE.

[Reported for The American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full details of illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

- 238,505. PAINT-CAN.—Charles E. Hore, Brooklyn, N. Y.
238,521. SAW.—Zeno Osgood, Brooklyn, N. Y.
238,529. STKAM-RADIATOR.—Louis C. Rodier, Westfield, Mass.
238,512. HINGED GATE-WHEEL.—Wm. H. Wright, Rochester, N. Y.
238,551. FIRE-ESCAPE.—Charles Barlow, Cookshire, Quebec, Canada.
238,552. FIRE-ESCAPE.—The same.
238,553. SASH-PULLKEY.—C. H. Bayley, Boston, Mass.
238,553. ROTARY-MEASURE.—Lewis W. Brown, Orange City, Kan.
238,552. DEVICE FOR BENDING METAL TUBES.—Wm. H. Grubb, Hannibal, Mo.
238,554. SHUTTER-WORKER.—Joseph S. O'Brien, North Wilbraham, Mass.
238,555. ARTIFICIAL STONE OR MARBLE.—David G. Weems, Baltimore, Md.
238,557. SASH-FASTENER.—Wm. H. Wolfrath, New York, N. Y.
238,555. OVERFLOW-INDICATOR.—John P. Conlon, Boston, Mass.
238,554. SHUTTER-WORKER.—Russell G. Dudley, Jersey City, N. J.
238,550. WHITE-ZINC PIGMENT.—Thomas Griffiths, Liverpool, County of Lancaster, England.
238,554. WOOD-PLANING MACHINE.—Samuel S. Hazeland, St. Sampson's, County of Cornwall, England.
238,557. PLUMB-LEVEL.—Henry Hobson, San Francisco, Cal.
238,559. BRICK-MACHINE.—Geo. Logan, St. Louis, Mo.
238,571. SHUTTER-WORKER.—Peter S. Robinson, Cedar Falls, Iowa.
238,577. SASH-FASTENER.—Edward J. Stearns, Boston, Mass.
238,579. LOCKING-LATCH.—George W. Tallman, New York, N. Y.
238,579. SHEET-METAL CUTTER.—Elijah M. Wilbor, Taunton, Mass.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—Thirty-two building permits have been issued since the last report, the following only being of sufficient importance to be mentioned:—
Chesapeake Gunpowder Co., three-story brick building, 800 E. Jackson St.
S. S. Clayton, 2 four-story brick buildings, on Gay St., between Exeter and High Sts.
E. Cunningham, 2 three-story brick buildings, on Fayette St., near East St.
W. S. Boyle, three-story brick building, on Lexington St., between Liberty and Park Sts., 82 x 100.
Martin Kenny, 5 two-story brick buildings, Halbert St., near Nicholson St.
Gilbert Leimbach, addition and improvement to dwell., on Broadway, between Pratt and Gough Sts.
Henry Westphal, 8 two-story brick buildings, Clarkson St., near Randall St.
M. Creighton & Co., five-story brick warehouse, on Holliday St., between Bath and Centre Sts., 50 x 70.
August Berkmeier, three-story brick building, Fremont St., between Freestman St. and Patterson Ave.
HOUSE.—Messrs. Wyatt & Sperry are preparing drawings for a country residence for Mr. Charles Mayer, to be built near the Relay House on the B. & O. R. R., to be 35 x 40, two stories and attic, and to cost \$1,500, including stable.
OFFICE-BUILDING.—The old building, No. 6 South St., owned and occupied by the American Fire Insurance Co., is being torn down to give place to a new structure to be built by the Insurance Co. The building will measure 25 x 100, three stories and basement, of pressed brick, with finish of Chest River stone and terra-cotta. Mr. Charles L. Carson is the architect.
REBUILDING.—The residence of Mr. Chas. Fisher, on Charles St., lately seriously damaged by fire, is in course of reconstruction, under the superintendence of Messrs. Wyatt & Sperry, architects. H. Smith & Son has the carpenter-work.
CHURCH.—Plans are now being prepared for a new Presbyterian church, which will be located on the north side of Mt. Vernon Place, between Cathedral and Charles Sts., to be built by Mrs. Abigail Hupfeld, in memory of her husband; seating capacity 600. Mr. John Elliott is the architect.
ALTERATION.—Messrs. Wyatt & Sperry are preparing drawings for an addition to the country residence of Mr. Chas. D. Fisher, to be built at Lake Station, W. C. R. R., cost, \$2,000.

Boston.

BUILDING PERMITS.—Brick and Stone.—East Fourth St., between H and I Sts., for Wm. Shenck, 3 dwell., 16 x 35, three stories; J. Smith, builder.
Marlboro' St., near Hereford St., for Charles J. Sprague, dwell., 14 x 40, two stories and mansard; J. Smith, builder.
Boston & Providence R. R. Repair-Shop Yard, for

B. & P. R. R. Co., varnish shop, 37 x 150; Chas. A. Fox, builder.
No. 339 and 341 Beacon St., for Samuel T. Ames, 2 dwell., 25 x 48, three stories; Frank Jones, builder.
Dartmouth St., cor. Harwich St., for Albert D. Killham, tenement-house, 40 x 88, five stories.
Nos. 30 and 32 Kilbo' St., and 8 Central St., for Moses Williams, office-building, 24 x 60, and 23 x 56, five stories; J. W. Leighton, builder.
Wood.—Ely St., near Greenough Ave., for Jabez S. Holmes, dwell., 33 x 41, two stories; John D. Wester, builder.
C St., near West Seventh St., for Mrs. Ellen Crowe, dwell., 21 x 35, two stories; Jas. Currie, builder.
Ashford St., near Chester St., for Isaac P. Pratt, Jr., dwell., 22 x 32, two stories, pitch; Wesley B. Cameron, builder.
Pulham St., near White St. for Cyrus H. Taggard, 2 dwell., 19 x 36, one-story; mansard; Davis Damon, builder.
No. 538 Dudley St., for Uriel H. Crocker, store, 20 x 30; Ira A. Medbury, builder.

HOUSE.—A residence is now being erected for Mrs. M. E. Knowlton. It is a stone-front, 22 x 75; Messrs. Vinal & Dodge, masons; L. Greely, carpenter; Messrs. Allen & Kenway, architects.

REPORT OF THE INSPECTOR OF BUILDINGS.—The following shows the operation of the department in detail: The number of brick, stone and iron buildings for which permits have been issued during the year, 309; number of wooden buildings, 494; number of sheds situated upon wharves within the building limits of the city, 9; of buildings for which permits have been issued to have additions built to them, or to have alterations and repairs made upon them, 1,294; of alterations and repairs made, 1,294; of notices received of intentions to put in heating apparatus, 479; of lanterns, street signs and transparencies examined, 21; of public halls examined with reference to granting a license to occupy the same, 15; of buildings upon which repairs have been made with reference to fire-escapes and means of egress, 551; of buildings examined that were damaged by fire, 352; of elevators and hoist-ways examined, 361; permits issued to occupy streets for building purposes, 1,284; of buildings, walls, etc., reported to be in an unsafe condition, 153; of chimneys reported unsafe, 249; of defective flues, 25; of unsafe heating apparatus, 58; of buildings reported as being deficient in means of egress and fire-escapes, 115; of violations reported, 507; of cases referred to the city solicitor, 9; of brick buildings completed during the year, 159; of wooden and frame buildings completed, 273; of buildings upon which additions, alterations and repairs have been completed, 2,198; of steam boilers, engines, etc., built, 300; of heating apparatus set, 472; of examinations made, 17,231; of notices issued, 861. Estimated cost of completed brick buildings, \$1,400,100; of completed wooden and frame buildings, \$474,752; of completed additions, alterations and repairs, \$1,227,239; of setting steam boilers, engines, etc., building furnaces, ovens, ranges, etc., \$202,188; of setting heating apparatus, \$85,674; of securing unsafe buildings, walls, etc., \$10,707; of protecting elevator and hoist-ways openings, \$299; of securing dangerous chimneys, \$4,620; of providing fire-escapes and additional means of egress, \$4,182. Estimated amount of damage to buildings by fire, \$157,207.

Brooklyn.

BUILDING PERMITS.—Cotton, etc., n. s., 25 x Lewis Ave., 4 three-story brick and stone stores and dwell., 18'9" x 45'; owner, Chas. G. Hall, 68 Patchen Ave.; architect, W. H. Dougherty.
Fulton St., n. s., 50' w. Second Ave., 2 two-story frame stores and dwell., 25' x 45'; cost, each \$2,000; owner and builder, Robert Given, 55 Canton St.
ALTERATIONS.—Broadway, No. 25, one-story brick extension, 15'6" x 14'0"; cost, \$2,800; owner, Philipp Knatz, 163 Broadway; architect, A. Herbert; builders, J. Besson and J. Crawford.
Fulton St., n. w. cor. Fort Green Place, three-story brick extension, 41'9" x 6'8" and 20'6"; owner, Menstrup, Fulton St., n. w. cor. Carlton Ave.; architect, Wm. Field & Son.
Spencer St., No. 81, new roof; cost, \$2,450; owner, Michael Duff, on premises; builder, M. Shortley.
Dequay St., No. 314, three-story brick extensions, 13'4" x 14' gravel roof and front altered; cost, \$1,000; owner, E. Packard, executor, 102 Montague St. architect, G. L. Morse; builders, J. J. Bensen and Morris & Scleror.

Chicago.

BUILDING PERMITS.—E. J. Lehman, two-story brick dwell., 23' x 70'9", 9 Michigan Ave.; cost, \$7,500.
William Waller, two-story brick store and dwell., 55' x 120', lots 25 to 29, block 15, Bickerdike Ave.; cost, \$15,000.
Ross Stettin, two-story brick dwell., 23' x 28', Maxwell cor. Halstead St.; cost, \$2,000.
Jno. Winer, two-story brick dwell., 28' x 30', 325 East Chicago Ave.; cost, \$5,000.
L. Wood, four-story brick dwell., 22'6" x 60', Chicago Ave., near Franklin St.; cost, \$7,500.
Frank Serbant, two-story brick dwell., 20' x 50', Eighteenth St., near Throop St.; cost, \$3,000.
Frank Mettels, same, 20' x 52', Loomis St., near Nineteenth St.; cost, \$4,000.
J. H. & J. R. Winterbotham, three-story brick store, 55' x 150', 335 and 397 Fifth Ave.; cost, \$12,000.
H. Kolba, three-story brick store and dwell., 25' x 75', 2217 Archer Ave.; cost, \$10,000.
Edward Koch, four-story brick store and dwell., 20' x 30', Lake St., near Franklin St.; cost, \$7,500.
Ulrich, three-story brick dwell., 22' x 60', Grant St., near Clark St.; cost, \$7,000.

LIBRARY.—At a meeting of citizens held at the Palmer House, March 11, to take some steps commemorative of the tenth anniversary of the great fire, it was decided to drop all other plans and adopt one

which proposes the erection of a building for the public library, to cost half a million dollars.

Cincinnati.

BUILDING PERMITS.—The following permits have been issued during the month of February:—
Thos. Emery Sons, 2 two-story brick factory, 12,000
Thos. Nottingham, four-story brick factory, 12,000
W. G. Fischer, three-story brick, 10,000
Jas. Lowman, 2 three-story dwell., 16,000
John Guns, three-story brick, 5,000
J. B. Campbell, 4 three-story brick, 3,000
R. Rover, four-story brick factory, 4,500
Catherine Anderson, French flat hotel, 60,000
Mr. L. Schmitt, three-story brick, 27,000
Thos. Emery Sons, five-story stone front, 12,000
Wm. Budd, three-story brick, 4,000
H. J. Heedy, two-story brick, 3,000
Richard Malley, three-story stone front, 6,000
H. L. Lovell, six-story stone-front store, 20,000
Mrs. Fischer, seven-story stone-front store, 7,000
C. Kettel, three-story brick, 21,000
McLaren Estate, 4 three-story dwell., 17,000
H. Hardinghaus, two-story brick factory, 3,000
Peter Brock, three-story brick, 5,500
Lewis Fischer, seven-story stone-front store, 21,000
O. Kettel, three-story brick, 5,000
P. Beechey, three-story brick, 5,000
Mrs. Greive, two-story brick, 4,500
If permits for repairs, 15,000
Total cost for the month, \$562,500
Total permits for the month, 60
Total permits to date, 60
Total cost to date, \$301,500

Cleveland.

PLANING-MILL.—Brooks & Co., contractors, are building a three-story brick planing-mill and factory on Centre St., cost, about \$3,000.

HOTEL.—Mr. B. S. De Forest has completed the plans for the hotel at the corner of Hamilton and Ontario Sts. The building will be 80' x 180', six stories high, built of brick and Ohio sandstone. It will contain forty-five complete apartment houses. The owners are Colgate Hoyt, H. C. Rouse, and C. P. Leland, of this city, and J. Trevor, of New York.

APARTMENT-HOUSES.—On Worthington St., near Clift St., Mr. W. B. Horst has built a brick apartment-house, 30' x 36', three stories high.

Retburg's Hall, on St. Clair St., will be converted into an apartment-house.
Plans are completed for a large apartment-house for Mr. W. B. Hall, on Payne Ave., near Belden St. It will be 60' x 150', four stories high, built of brick. Plans are being made for a large apartment-house on Sterling Ave., near Prospect St., 100' x 150', of brick and sandstone. The house will be, if built, four stories with high basement. It will contain forty apartments of four rooms each.

DEPOT.—The plans and specifications of the new N. Y. P. & O. passenger depot, to be built south of the viaduct, on the site formerly occupied by the stone-yard, are all drawn up and work will be begun at once. It will be about 15' x 150'. In front of this will be the train-shed, 320' long, and wide enough for two tracks and roomy platforms.

New York.

BUILDING PERMITS.—Nos. 191 and 193, four-story brick stable and warehouse, 50' x 88'; cost, \$1,000; owner, Joseph Stoltz, 227 Bowery; architect, W. J. Goad; builders, M. Edlitz and Grissler & Faule.
Sixth St., No. 615, five-story shop and dwell., 25' x 62'; cost, \$12,000; owner, Jeremiah Hayes, 649 Fifth St.; architect, J. Josephell.

Fifty-Ninth St., s. s., 12 w. Ave. A, two-story brick storage and stable, 25' x 60'; cost, \$3,500; owner, Albert Zoller; architect, A. F. Fund.
Forth St., s. s., 25' w. Second Ave., five-story brick tenement, 25' x 70'; cost, \$3,500; owner, R. J. Kyle, 150 East Fortieth St.; architect, Jas. Lyle.
White St., No. 8, five-story brick warehouse, 25' x 90'; cost, \$20,000; owner, S. J. Hopkins, trustee, 240 Pearl St., or 104 East Forty-Fifth St.; architect, C. G. Haight; builder, D. H. King, Jr.

One Hundred and Twenty-Third St., n. s., 150' w. Seventh Ave., 8 three-story Connecticut brownstone dwell., 12'7" x 50'; cost, each \$9,500; owner, W. Broas, Haverstraw, N. Y.; architect, Chas. Baxter; mason, W. Harrow.

One Hundred and Thirtieth St., s. s., 15' w. Sixth Ave., 2 three-story Connecticut brownstone dwell., 14' and 18' x 60'; cost, each \$7,200 and \$10,000; owner, Thomas Keenan, 50 East One Hundred and Twenty-Fifth St.; architect, Chas. Baxter; builders, W. Adams and S. Weir.

One Hundred and Twenty-Second St., n. s., 100' e. Second Ave., 3 four-story brick apartment-houses, 18'4" x 57', and extension 12'; cost, each \$12,000; owner, W. W. Adams, One Hundred and Twenty-Fourth St. and Fourth Ave.; architect, Chas. Baxter.

Park Row, Nos. 31 and 32, five-story brick-and-iron store and offices, 46'6" and 52' x 55'; cost, \$30,000; owner, Jay Gould, 80 Broadway.

Fifth St., Nos. 225 and 229, 2 five-story brownstone tenements, 25' x 60', extensions 7' x 11'9"; cost, \$10,000; owners, Mrs. Marie and Mr. Henry Gucker, 153 Second Ave.; architect, F. W. Kient; builder, J. P. Schweckert.

Second Ave., n. e. cor. Seventy-Second St., four-story brownstone store and tenement, 25' x 66'2"; cost, \$16,000; owner, Samuel Simons, 236 Delancey St.; architect, H. J. Dudley.

Seventy-Second St., n. s., 25' e. Second Ave., 2 four-story brownstone flats, 25' x 60', cost, \$20,000 and \$10,000; owner, Samuel Simons, 236 Delancey St.; architect, H. J. Dudley.

Second Ave., n. s., 16' e. Seventy-Second St., four-story stone store and tenement, 25' x 70', cost, \$18,000; owner, Samuel Simons, 236 Delancey St.; architect, H. J. Dudley.

Third Ave., n. s., from Ninety-Ninth to One Hundredth St., 8 four-story Connecticut brownstone stores and apartment-houses, 25' x 65'; cost, each \$13,500; owner, Samuel Simons, 206 Broadway; architect, Chas. Baxter; builder, G. A. B. Hopkins.

Third Ave., n. e. cor. Ninety-Ninth St., 3 four-story

(Continued on next page.)

CLIPPINGS.

THROUGH RIVERS.—During the German armies, in the winter of 1870-71, the most important part in certain attempts to cross between Paris and the provinces, was the suggestion originated with a man who was, after the war, created a baron, and proposed to send powerful currents at the nearest available point in Paris, by delicate galvanomagnetic currents as might not have been the result of preliminary experiments had been the manufacture of M. Claparté, and Berthelot, it was decided to exploit, in order to try to establish a telegraph line. The balloon descended at Lyons and Bordeaux, outside the city, and apparatus, there was again necessary, which on arrival was again regained the banks of the river, the frost proved inimical, since the beginning of December, however, to have been made on the ice. It was too late, and the exploit from among those which would all other sieges of history.—

of medieval narrow-mindedness the face of the earth. It has at the face of Rome that the venerable ground, in order that a number of its site. The huge group of sordid is the most ancient of its kind in the reign of Julius Cæsar and was occupied by nearly eight thousand. It is stated to have been King Titus near the Fons Janiculensis, for diplomatic envoys when visiting and Paul came to the Eternal City, and in the Ghetto. Ten centuries later, the Jewish jeweller, Elkannan, whose grandson, under the name of a Jew, in 1130 to 1138. The well is a historical reproach to the one of the many modern reforms in city upon which its municipal is.—London Telegraph.

—Mr. A. R. Spofford, Librarian of the Boston Public Library, in his statements before the American Association for the Advancement of Science, to the destructiveness of heat on libraries. He described the north gallery of the Congressional Library, and intelligent beings they are. Their shrivelled and parched the destructiveness of heat, and yet coal-gas; these are excluded from the system followed upon the action of smoke, the opinion being pretty generally the very worst kind and should be capable to damage from heat. The only the combustion from gases propriety of getting rid of heat infiltration and construction.—Washington.

—It is related of Stephen Girard always said he intended to do well, and to be twenty-one he expected to be a millionaire, and perhaps in the world. But the old fox encouraged courage: "I suppose I am now I would say something to you as to do better do?" "and my advice is to be an old millionaire," and my advice is to be an old millionaire, and my advice is to be an old millionaire.

cooper in Spring Gardens, became a barrel as good as a barrel as the best. He had graduated, and was ready to be a cooper, and immediately could turn out. Ben did his pretentious counting-room. Old Girard said the price.

as low as I can live by." "Well,"

Stephen settled it with a check for accompanied with this little moral to

the best possible manner, and if you did have a good trade to fall back on."—Industrial World.

of apartments without a fireplace or a chimney, with only one fire-

BUILDING INTELLIGENCE.

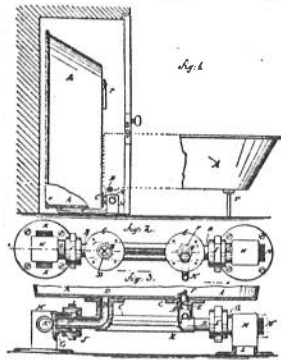
[Reported for The American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

237,494. FOLDING BATH-TUB.—George Damsen, So. Brooklyn, N. Y. The object of this invention is to construct a bath-tub in such a manner that they can be raised into a vertical position when not required for use. A represents a bath-tub, to the foot of which are attached the upper ends of two bent pipes, B, the bends of which are connected by a bar, C, cast in one piece with the pipes, B. The ends of the pipes, B, pass through the bottom of the bath-tub and are flush with its inner surface. The inner end of the inlet-pipe, B, is provided with a strainer, D, and the outlet-pipe, B, at a little distance from its inner end, is provided with a strainer, E. The outer ends of the pipes, B, are inserted in nipples, F, formed upon the inner sides of the stud, H, the lower ends of which are flanged to receive the screws that secure these studs to the floor. The pipes, B, and studs, H, thus form a hinge for connecting the bath-tub to the floor, so that the bath-tub can be turned up into a vertical position



when not required for use. The cold-water pipe is connected with one of the nipples, K, and the hot-water pipe with the other; or the hot and the cold water pipes can be connected with a single pipe, and the single pipe connected with one of the nipples, so that hot and cold water can be introduced through a single nipple. The stud, H, connected with the discharge-pipe, B, has an opening, L, in its bottom, with which the waste-pipe can be connected; or the opening, L, can be closed with a plug and the waste-pipe coupled to a nipple, M, upon the side of the stud, H. The nipple, M, is closed with a screw-cap when the overflow-pipe is connected with the opening, L. N is the waste-pipe, the upper end of which is connected with an aperture in the upper part of the foot of the bath-tub. The lower end of the overflow-pipe, N, is connected with an aperture in the discharge-pipe, B. The upper edge of the bath-tub, A, has a ledge, O, formed upon it to prevent any water left in the bath-tub from trickling upon the floor when the bath-tub is turned up. With this construction the bath-tub can be arranged in a small closet, into which it can be shut, as shown in Fig. 1, and through the door of which it can be lowered into a horizontal position when required for use.

237,753. WEATHER-STRIP.—Chester L. Bell, Maple River Junction, Ia. 237,756. AUTOMATIC ELECTRIC ANNUNCIATOR.—Addison Bradford, Brooklyn, N. Y. 237,758. CROSS-CUT SAW HANDLE.—William E. Brooke, Trenton, N. J. 237,761. PIPE-WRENCH.—Jeremiah J. Carmody, Brooklyn, N. Y. 237,762. ELEVATOR.—George W. Clayton, Cleveland, O. 237,768. GAS-VALVE.—J. C. Druekleb and W. Feis, Paterson, N. J. 237,775. EXPANSION JOINT.—William Forman, Bradford, Pa. 237,791. GLASS BUILDING-BLOCK.—Christopher W. McLean, Chicago, Ill. 237,798. WINDOW-HEAD FASTENER.—Francis Miller, Downer's Grove, Ill. 237,805. BURGLAR-ALARM AND DOOR-BOLT.—Reuben M. Patchin, Nayland, N. Y. 237,833. ELECTRIC CALL-BELL.—Alex. G. Bell, Washington, D. C. 237,836. WATER-CLOSET.—August F. Blesch, Columbus, O. 237,855. FAUCET.—John Clifford, Chicago, Ill. 237,858. CEMENT ILLUMINATING-TILE.—John M. Cornell, New York, N. Y. 237,872. SAW-FLING MACHINE.—Eugene P. Ellis, Emporia, Kan. 237,875. SAWING, GROOVING AND PLANING MACHINE.—G. M. N. Fay, Eureka, Cal. 237,876. SHIP-FASTENER.—Henry Fellows, Bloomington, Ind.

238,877. WEATHER-STRIP.—John C. Flester, Reading, Pa. 238,881. REVERSIBLE COMBINATION VISE.—F. T. Forsyth, North Troy, Vt., and D. L. Hildreth, Philadelphia, Pa. 238,888. EARTH-ANVIL.—Jacob H. Gould, Atwater, O. 238,923. CURTAIN-FIXTURE.—Benjamin Landon, Canton, Pa. 238,959. ADJUSTABLE TOOL-HANDLE.—Simon B. Parker, Brooklyn, N. Y. 238,960. SAW-HANDLE.—Harvey W. Peace, Brooklyn, N. Y. 238,967. WINDOW-SCREEN.—John Reardon, Ione City, Cal. 238,990. DRAUGHTING INSTRUMENT.—Thomas Tastell, Council Bluffs, Ia. 239,007. ROOF-TILE.—John J. Williams, Fair Haven, Vt.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—Twenty-nine building permits have been issued since the last report, the following only being of sufficient importance to be mentioned.

Casper Melcher, three-sty brick building, No. 242 Light St., between Montgomery and Hugh Sts.

Geo. S. Trot, 2 three-sty brick buildings, Nos. 7 and 8 Lexington St.

Samuel Black, 3 three-sty brick buildings, n e cor. John and Lanvale Sts.

Samuel Black, 3 three-sty brick buildings, on John St., between Lanvale and Dolphin Sts.

C. S. Mallory, one-sty brick building, on Block St., near Falls Ave., 36' x 80'.

INSURANCE OFFICES.—Work on the new building for the American Fire Insurance Company will be begun at an early date. The work will not be done under contract, but under the supervision of Messrs. Bernard Clark & Son, the company furnishing all materials; Mr. Chas. L. Carson, architect.

HOUSE.—Dr. S. W. Seldager is about to build a three-sty house, on the corner of Caroline and Eager Sts., 17' x 70', of pressed brick, with stone and terra-cotta finish; Mr. Chas. L. Carson, architect.

Boston.

BUILDING PERMITS.—Ferdinand St., junction of Fayette St., for John S. Hobbs, dwell., 18' x 56' 8", three stories; Joshua Dyer, builder.

No. 150 Marlboro St., for John L. Thorndike, dwell., 26' x 65', three stories and mansard; C. E. Clark, builder.

Lancaster St., near Merrimac St., for Sylvester Bowman, mercantile building, 55' x 75', five stories; H. C. Foundry St., near Division St., for John J. Hallahan, stable, 27' x 59', two stories.

Wilmut St., Nos. 16 and 18, for Chas. A. Dean, 2 dwells., 20' x 40', two stories, pitch; Charles H. Blodgett, builder.

Warren St., near Quincy St., for Thomas Parker, dwell., 34' x 38', two stories, pitch; Chas. H. Blodgett, builder.

Virginia St., near Bird St., for Edward McKeech, dwell., 30' x 33', two stories, hip; Edw. McKeech, builder.

Liverpool St., near Central Square, for Wm. L. Sturtevant, storage of lumber, 35' x 62', three stories; Samuel Y. Chase, builder.

Adams St., near Butler St., for James H. Bourne, dwell., 31' x 31', two stories, pitch; J. H. Bart & Co., builders.

Brooklyn.

BUILDING PERMITS.—Lafayette Ave., s s 255' x Bedford Ave., 2 four-sty brick flats, 23' 6" x 63'; cost, each \$13,000; owner, Paul C. Greening, 420 Gates Ave.; architect, Parit Bros.; builder, J. A. Thompson.

Graham Ave., w s 75' x Meserole St., three-sty frame store and tenement, 25' x 55'; cost, \$1,500; owner, Chas. Kiehl; architect, Jno. Platte; builders, Geo. Lehman and D. Kreuder.

Park Place, s s 99' x Sixth Ave., 4 four-sty brownstone dwells., 18' 9" x 48'; owner and builder, John Thomas, 32 Park Place.

De Kalb Ave., s s 300' x Nostrand Ave., three-sty frame store and dwell., 25' x 40'; cost, \$2,800; owners, Messrs. Duffy, 635 De Kalb Ave.; architect, Mr. McMahon.

Heres St., s s between Wythe and Bedford Aves., 5 two-sty brick stores and dwells., 19' x 43'; owner and builder, Richard Healy; architect, J. D. Reynolds.

Woodbine St., No. 68, e s 200' x Bushwick Ave., three-sty frame dwell., 22' x 32'; cost, \$3,000; owner, R. Cornell, 70 Woodbine St.; builder, R. Wright.

Carroll St., n s 70' x Sixth Ave., 4 four-sty brownstone tenements, 20' x 50'; owner, architect and builder, Geo. W. Brown, 728 Fulton St.

Fulton St., s s 500' x Franklin Ave., 4 four-sty brownstone tenements, 20' x 50'; owner, architect and builder, same as last.

Fordham Ave., w s 20' x Hancock St., 2 four-sty brownstone tenements, 20' x 50'; owner, architect and builder, same as last.

Bedford Ave., w cor. Hancock St., four-sty brownstone store and tenement, 20' 6" x 60'; owner, architect and builder, same as last.

Cater St., n s 275' from Guernsey St., 3 two-sty frame dwells., 15' x 40'; cost, \$3,000; owner, D. W. Moore; builder, D. Miller.

North Fourth St., No. 119, three-sty frame tenement, 25' x 47'; cost, \$4,500; owner, Fr. Maas, 551 Third St.; builder, John Rueger.

Thirty-Ninth St., s s 400' x Third Ave., 3 two-sty frame dwells., 16' 9" x 39'; cost, each \$2,800; owner, John G. Burke, 321 East Twenty-Seventh St., New York; architect, J. H. O'Rourke; mason, Jas. Hart.

Stockton Heights, w s between Poplar and Vine Sts., three-sty brick factory, 24' x 70'; cost, \$6,000; owner, Thos. Messenger, Pierpont St., cor. Willow St.; architect, Mr. Provost; builders, D. P. Ledyard and F. D. Norris.

Stockton St., No. 266, three-sty frame tenement, 21' x 40'; cost, \$3,500; owner, S. Schientlar. South Ninth St., No. 208, s s 160' from Seventh St., three-sty brick dwell., 19' 9" x 56'; owner, Frederick Ellmes; architect, A. Herbert. Seabring St., n s 350' x Richard St., one-sty brick shop, 50' x 50'; owner, Angus McLaughlin, 119 Oak St.

De Kalb Ave., n s 305' x Lewis Ave., 6 three-sty brick flats, 20' x 45'; cost, each \$3,000; owner, C. F. Skelton, 464 Herkimer St.

Jefferson St., s s 220' x Bedford Ave., 3 three-sty brownstone flats, 21' x 56', gravel roof, wooden corridors; owners, Brown & Sheldon, 401 Wyckoff St.; builders, J. M. Brown and C. B. Sheldon.

ALTERATIONS.—First St., s e cor. South Sixth St., add two stories; cost, \$2,500; owner, F. Umble, on premises; builders, W. & T. Lamb, Jr.

Culton St., s e cor. Yates Ave., alter stairs; cost, \$250; owner, August Imming, Chauncey St., cor. Fitch Ave.; builder, J. Kane.

Hoyt St., s e cor. Butler St., two-sty brick extension, 20' x 20'; cost, \$2,000; owner, Thos. Fitzpatrick, on premises; architect, J. Mumford; builders, Daly & Hudson.

Columbia Heights, e s 75' x Clark St., two-sty brick extension, 17' 4" x 28'; cost, \$2,000; owner, H. C. Bowen; builder, James P. Miller.

HOSPITAL.—The site for the new hospital, for which George I. Seney has given \$240,000, is on high ground, near Prospect Park, and is bounded by Seventh and Eighth Aves., and Sixth and Seventh Sts. Among the trustees are Judge George G. Reynolds, the Rev. Dr. J. M. Buckley, W. M. Ingraham, C. D. Macdonald, John French, ex-Mayor Booth, James M. Taft, and the Rev. Dr. C. B. Sheldon.

OLIVER HOYT, of Stamford, Conn.; and John Ruyon, of New Jersey. The plan under consideration for the structure is to erect several separate buildings, instead of one large one.

Buffalo.

WAREHOUSE.—Four-sty brick warehouse, corner of Broadway and Oak St.; cost, \$13,000; architects, Holmes & Little; owner, D. Ullman.

HOUSES.—Frame dwell., Richmond Ave., near the Circle; cost, \$5,000; architect, B. W. S. Clark; owner, James Crooker, Esq.

Three-sty brick dwell., 21' x 55', Buffalo pressed brick and sandstone, cor. Washington and Mohawk Sts.; cost, \$12,000; owner, Dr. F. C. Longnecker; architect, Geo. J. Metzger.

NEWSPAPER OFFICE.—Mr. M. E. Reeb is the architect of the new seven-sty building for the Courier, which is to be built on Main St., at a cost of \$50,000.

CHURCH.—The new Prospect Ave. Baptist Church is to be built by Mr. F. W. Cautkins; cost, \$50,000.

Chicago.

BUILDING PERMITS.—Garritt Biblical Institute, four-sty brick store, 20' x 82', 224 Lake St.; cost, \$6,000.

Alston Manufacturing Co., three-sty brick factory, 60' x 88', Currier and Crittenden Sts.; cost, \$2,500.

W. H. and J. J. West, two-sty brick dwell., 23' x 51', Harrison St. and Hoyne Ave.; cost, \$7,000.

John Stinson, three-sty brick factory, 30' x 80', 99 and 101 Monroe St.; cost, \$7,000.

G. N. Noyes, two-sty brick building, 20' x 48', 2335 Michigan Ave.; cost, \$9,000.

F. Blaser, three-sty brick factory, 28' x 100', 123 La Salle St.; cost, \$8,000.

G. J. Mevins, additional story, 45' x 60', 29 and 31 Hubbard St.; cost, \$2,000.

G. W. Higgins, two-sty brick dwell., 18' x 38', 403-11 Van Buren St.; cost, \$7,000.

D. Martin, two-sty brick dwell., 20' x 40, 15 Taylor St.; cost, \$1,500; same, 20' x 7', 217 Third Ave.; cost, \$3,000; same, 20' x 40', 221 Third Ave.; cost, \$1,500; same, 20' x 40', 222 to 224 Third Ave.; cost, \$2,000.

Norton Frog Co., one-sty brick factory, 25' x 100', 66 Pacific Ave.; cost, \$2,000.

F. Launder, three-sty brick store and dwell., 25' x 12', 72 Campbell Ave.; cost, \$1,000.

N. Kuhner, three-sty addition to factory, 20' x 60', 215 Superior St.

J. C. Haskins, two-sty brick dwell., 18' x 34', 21 Lincoln Place; cost, \$3,500.

P. Herbert, three-sty brick dwell., 25' x 56', 633 North Wells St.; cost, \$1,000.

OFFICE-BUILDING.—The Chicago, Burlington & Quincy Railroad have had plans prepared for an office-building on the corner of Adams and Franklin Sts. It will be of brick and stone, will be five stories high, and will cost \$200,000.

Mr. Cyrus Wilcox will build, at the corner of Jackson and State Sts., a four-sty brick building for offices; cost, \$20,000.

APARTMENT-HOUSE.—On the corner of Halsted and Lake Sts. will be built a four-sty brick building, 50' x 100', to be used for stores and flats.

New York.

BUILDING PERMITS.—Sedgwick Ave., w s, being Morris Dock, Harlem River, 3,000' n Highbridge, 20' x 28'; cost, \$2,800; owner, W. Spangler, Grand Central Depot; architect, C. D. West.

Park St., No. 564, three-sty brick shop, 20' x 22' and 21' 6" x 80'; cost, \$4,000; owner, Dennis Shea, 59 Park St.; architect, Julius Bookel; owner and Franklin St.

Ninth Ave., No. 659, five-sty Connecticut brownstone tenement, 28' 4" x 59' and 63' 6"; cost, \$15,000; August Greif, architects, Thom & Wilson.

Fourth St., No. 533, w s, four-sty brick tenement, 25' x 34'; cost, \$17,000; owner and builder, P. Hermann, 340 West Fourteenth St.

Marion St., No. 48, five-sty brick factory, 25' x 72' and 96'; cost, \$12,500; owner, Thos. Woodard, 46 Marion St.; builder, J. Sexton; carpenter, C. Callahan.

Fifty-Eighth St., s s, 141' 5" w Ave. A., one-sty brownstone tenement, 20' x 60'; cost, \$10,000; owner and builder, James F. McManus, 320 East Sixty-Sixth St.

The Hundred and Thirty-Fifth St., n s, 225' x Willis Ave., 3 three-sty brick dwells., 10' 8" x 43'; (Continued on next page.)

householders and plumbers, that when information about the Hellyer Water-Closets is given, they should communicate directly with us, and we will cheerfully furnish it. This card will not be taken as an invitation upon our competitors in the wholesale, who, when our goods are asked for, only do what might be expected, under the circumstances, namely, try to sell something else; some time we trust our explanation will, in addition of every one, be a justification of the mode of doing business in this particular.

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BUILDING INTELLIGENCE.
No. 20, cost, \$3,000; owner and builder, J. B. Squires, East Twenty-Ninth St.
No. 24, front alterations; cost, \$2,000; owner, J. W. Dimick, 268 Canal St.; builder, J. H. Ritchie.
No. 261 to 263, inclusive, four-sty brick extension, 17' x 20', front alterations; cost, 25,000; owner, J. G. Attridge, 242 East Houston St.; architect, Chas. Startzkofer.
No. 12, curry rear wall up, also three-sty brick extension, 20' x 20'; cost, \$2,000; owner, Estelle Sauer, 82 Second St.; builders, J. Finch and J. Muhl.
No. 10, four-sty brick extension, 10' x 9', interior and front alterations; cost, \$16,000; owner, J. H. Wright, 140 Pearl St.; architect, M. Field & Son.
No. 163 w, three-sty brick extension, 10' x 17' 2"; cost, \$5,000; owner, W. P. Langworthy, 324 West Forty-Eighth St.; architect, A. B. Smith; builder not selected.
No. 7 w, two-sty brick extension, 20' x 17' 1/2", etc.; cost, \$25,000; owner, Association of Bar, New York; architect, C. C. Haight; builders, Robinson & Wallace and Smith & Crane.
No. 100 and Fifty-Second St., n. s. 124' x 50' frame extension, 15' x 37', gravel of wooden cornice; cost, \$2,150; owner, A. Trange, 147 West Twenty-Sixth St.; architect, J. & J. Kirby.
Sixth Ave., Nos. 970 to 978, and Nos. 982 to 988, inclusive, fronts altered; cost, \$9,000; owner, Jonathan Richards, 27 Pine St.; architect, J. M. Forster.
Fifty-Sixth St., Nos. 239 to 245, inclusive, three-sty brick extension, 35' x 85' 6"; cost, \$1,000; owner, James Williams, 242 East Fifty-Fifth St.; builders, Hugh & Stewart.
Broome St., Nos. 43, 45 and 47, s. e. cor. Lewis St., added one story, interior alterations; cost, \$10,000; owner, E. Jones, 21 West Twenty-Third St.; architect and builder, E. Smith.
Twenty-Sixth St., No. 3, raised two stories; also twenty-sty extension, 30' x 50', interior alterations; cost, 2,500; losses, Mitchell & Kinsler, (announced on next page)

APRIL 2, 1881.

Entered at the Post Office at Boston as second-class matter.

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FURTHER accounts of the conflagration which destroyed the great dry-goods store "Le Printemps," in Paris, show that the catastrophe was probably due to the accidental kindling of gas which had escaped from a broken pipe. So rapidly did the flames spread that in nine hours after the first alarm nothing remained of the inside of the enormous building, eight stories in height, and a part of the walls had fallen. The property loss is now estimated at two millions of dollars, and a letter from Paris says that this dreadful destruction is largely due to the wretched inefficiency of the fire department. This is by no means the first time that complaint has been made of the fire-service in Paris. To say nothing of the inadequate supply of water for such purposes, the engines used are of a very primitive construction, as compared with our splendid apparatus; and the efficiency of our organization, which has been perhaps regarded as conveying a humiliating confession of our flimsy methods of construction, is hardly likely to meet with general imitation elsewhere for the present. One might think that the insurance companies, twenty of which will have to bear the whole loss by the burning of the "Printemps," would be disposed to promote measures of protection, but these have found out on the other side of the Atlantic, as well as this, that by taking advantage of the calamity to advance rates on all the other dry-goods warehouses in the place, they can in a few years recoup themselves at the expense of the policy-holders, with a reasonable prospect of a large profit in addition.

ANOTHER evidence that foreign modes of construction are not always so much superior to ours as is commonly supposed may be found in the destruction of the new theatre at Nice, which caught fire from escaping gas, as is supposed, and burned so fiercely and rapidly as to cut off the escape, not only of a large part of the audience, but of many persons on the stage. The fire broke out early in the evening, before the auditorium was filled, but at least one hundred and fifty persons are known to have perished. The building stands by itself on the shore of the Mediterranean, so that there was an opportunity for arranging ample means of exit, but the corridors within the building were narrow, dark and tortuous, and were soon choked by the struggling crowd. As in the Brooklyn Theatre, but one or two occupants of the upper gallery were able to escape. Nice was once a part of Italy, and the Italian traditions of incombustible building may have tended to the neglect of those appliances for subduing fires which no French city can afford to do without, for it seems that in default of better means, lines of men were formed to pass buckets of water, dipped from the sea close by, to throw upon the fire, an expedient which seems positively childish, although it is still usual on the Continent. It will surprise some persons to learn that the burning of a theatre is nearly as common an occurrence in Europe as in America. Of course, the number of such buildings is much greater there, but the list of casualties for the last ten years shows that those burned were almost equally divided between the two sides of the Atlantic.

THE Brush Electric Light Company has undertaken to light certain streets in Cincinnati by means of six or more towers two hundred feet high, containing immense lamps, the current

for which is to be supplied by means of an engine of one hundred and twenty-five horse-power. The company has applied for permission to open the streets and lay tubes for conveying the wires, but requests also to be allowed in case of necessity to suspend them from the poles belonging to the Bell Telephone Company. The telephone directors very naturally make objection to this, on the ground that accidents have already occurred from the proximity of telephone to electric-light wires, and that to expose their subscribers to the risk of having the energy requisite for supplying these huge lamps suddenly diverted through their bodies would be extremely imprudent. They call attention also to the fact that the telephone wires are frequently cut by firemen in order to raise ladders against burning buildings, and suggest that if the electric-light wires were to be confused with the others the danger to persons handling them would be very great. Another remark is made, which those who use telephones will find interesting, that the current induced upon the telephone wires by the proximity of the others would manifest itself by confused noises in the instruments, interfering very much with their proper use. The influence of an ordinary telegraph has been felt so strongly in a telephone wire strung on the other side of the street that one familiar with the Morse alphabet could read by sound in the telephone the messages passing through the other line, and electric-light wires make their proximity known by a sharp, trumpet-like noise.

TWO instances of the miserable folly with which workmen sometimes throw away their own and their children's bread at the beck of noisy agitators who have their private interests to serve, are reported recently. The spinners of the Chace Mill, in Fall River, have instituted a strike, with all the usual accompaniments of picketing the factory, sending warnings to other manufacturing centres, drawing relief from their poor fellow-workmen, and appealing to the city for support as paupers, for the sole reason that seven members of the Union, notorious for their turbulence and mischief-making propensities, have been discharged from the mill. Although the secretary of the Union, by proclamations alternately insolent and whining, seems to be endeavoring to lash his less instructed fellows into some act of violence, it can hardly be long before their children, if not themselves, will ask whether they are acting the part of men in allowing a few noisy demagogues to persuade them into abandoning both their duty—to labor for their families—and their right—to be paid for their labor—for the sake of gratifying the private revenge or conceit of persons who would not lift a finger to aid them in return. There can be but one answer to the question, and although it is almost too late to expect so much independence among the deluded work-people of Fall River, one can hardly help hoping that advantage may be taken of the opportunity to administer a sharp rebuke to the professional agitators who have so long cursed the city. The other case of organized and wanton resistance to wholesome rules has just occurred in Chicago, where a certain firm of stove founders revived an old regulation, by which any moulder who was careless enough to turn out a casting weighing over ten per cent more than the pattern, was obliged to melt it again, or suffer a small deduction from his wages. This rule, intended as much to secure good workmanship as to prevent waste of valuable iron, certainly involved no hardship to a decently attentive man, but the moulders chose to regard it as an infringement of their right to botch their work at other people's expense, and struck in a body. Few persons, we think, would regret to see the connection of such men with the trade permanently severed.

WE have to report the occurrence of labor troubles occurring among a class which has hitherto been exempt from these, among the other inconveniences of civilization. Fifty Indians, it appears, belonging to the Caughnawaga tribe, who were employed by their chief in working a mine belonging to him, struck for an advance of twenty-five cents per day in their wages, which have hitherto amounted to one dollar a day only. More than this, they have so far adopted the practices of their more enlightened brethren as to stipulate that an additional twenty-five cents shall be paid them on and after a given date, some weeks hence. It is a little startling to hear of a savage chief whose pay-roll amounts to fifteen thousand dollars a year, and whose warriors find thirty dollars a month insufficient to maintain them in a suitable style of paint and feathers, but under

the circumstances both parties are perhaps fortunate in living among the peaceful inhabitants of the Dominion. Not long ago a strike took place among the laborers on a Virginia railroad, which the conservative residents of the neighborhood undertook to settle by the methods peculiar to that region. Turning out in a body, well armed with shot-guns and revolvers, they drove the discontented laborers back to their tip-carts and shovels, and stood guard over them until they were satisfied that there would be no more attempts to escape or change the established order of things.

THE Board of Health of Newton, Mass., has issued a set of regulations which are in some respects better than any we have yet seen. Some parts of the city are just now in that stage of suffocation with their own foulness which succeeds the introduction of an abundant water-supply, and precedes the construction of sewers, and the only questionable regulation of the Board, — that which permits the construction of cesspools at a distance of not less than two rods from a well or cellar, — is no doubt a matter of necessity, since the lots are small, and citizens can neither be compelled to buy land at thirty or forty cents per square foot in order to increase the space between their cesspools and wells, nor to discontinue the use of the latter and bring the city water into their dwellings at their own expense. Aside from this unavoidable, but probably temporary permission, the rules are simple and easy to enforce, and combine to a remarkable degree that comprehension of the peculiar needs of the place, with a good knowledge of modern sanitary science, which gives value to such provisions. One of the best regulations is a rather unusual one on this side of the ocean. The Board requires that before any work of plumbing or drainage is undertaken in any building, a complete plan of all the pipes, traps, cesspools and other items shall be submitted to the City Engineer, for his approval or modification, as the case may be, and that no work shall be carried out except in accordance with a plan so approved or modified.

A DISCUSSION has been going on in the columns of the *Metal Worker* regarding the right of plumbers to charge for materials in their bills at the list prices, keeping for themselves the discount, or difference between these and the actual cost, which is in many cases very considerable. For instance, the discount from the list price of cast-iron pipe has been as much as seventy per cent, and on wrought-iron tubes and earthenware drain-pipes nearly as much. If then a plumber, in presenting an account for days' work and materials furnished, as is customary, charges these items at the list price, he simply pockets surreptitiously the amount of the discount, which he has done nothing to earn, and which he can only obtain by abusing the confidence of his employer, who is ignorant of the system, and supposes himself to be merely reimbursing the other for actual outlay. We are glad to see that the editor of the *Metal Worker* totally discountenances such practices, comparing plumbers to architects in their relation to their employer, and urging the propriety of their charging for personal services, in the same way as architects, engineers or other experts, and in a similar manner directing their client's expenditures for labor and materials without any attempt to appropriate his money without his knowledge in the shape of "profits" or "discounts." Nothing would do so much to improve the standing of good plumbers in the community as the adoption of this view. The itching for secret gains which is so strong in many men, and to which the dealers pander by refusing to communicate their discount sheets to those out of the trade, is itself a disqualification for any advisory or confidential position, and so long as this is indulged by plumbers, they must expect to be classed with those toward whom the only safe attitude is one of distrust.

A SCIENTIFIC investigation has recently been made into a matter which many plumbers and others have had presented to them in various ways, but which has been hitherto unexplained. It seems that in Germany the underground telegraph wires are often carried through lead pipes, and in renewing some wires in one of the large cities, the pipes were found to be corroded irregularly, the points of greatest corrosion being afterwards ascertained to coincide with certain places where the cable passed in contact with lime mortar or cement. Taking this circumstance as a point of departure, Dr. Rossel has studied the action of various substances upon lead, and finds that while carbonated lime exercises no action on the metal, the hydrate, as it exists in mortar, attacks it with considerable energy, and

if moisture is present, a sheet one-thirtieth of an inch thick may be eaten through in a year. The lead is converted into a basic carbonate, which flakes away, leaving holes and indentations. This corresponds perfectly with the phenomenon, with which many plumbers are familiar, of the corrosion which takes place in traps or lead-lined tanks into which plastering mortar is allowed to fall. We have in mind one case where a cistern of considerable size, lined with lead, and exposed to the dropping of particles of lime from the plastering overhead, was eaten through year after year, to the great perplexity of the owner and his plumber, who could find no explanation in treatises on chemistry for such action.

A CORRESPONDENT of the *British Architect*, who signs himself "Lex," explains the legal view of the relation between an architect and his client in regard to the commissions or perquisites which the former may have an opportunity of receiving without the knowledge of the latter. According to this authority, the relation between a person about to build and his architect involves a trust. "The client, not feeling himself competent to act for himself, appoints the architect his trustee to guard his interests and protect him from injury of every kind. Should the client suffer through the architect's default, the latter is liable under the statute of frauds to a criminal prosecution, and if he is convicted of malversation of trust he may be imprisoned at the discretion of the judge." "If," he goes on to say, "in the conduct of his client's affairs, an architect arranges to receive any remuneration for giving business to any one without the concurrence of that client, the law assumes a corrupt intent, and an architect would probably find it very difficult to purge himself to the satisfaction of the court." In illustration of the principle "Lex" supposes that a surveyor is asked his charge for preparing bills of quantities, and answers, two and one-half per cent, which he will divide with the architect. The architect replies that he does not wish to share the fee, and the surveyor says his charge will be one and one-half per cent; and that he had mentioned two and one-half because many architects expected to receive part. "When a client," he says, "under such circumstances pays two and a half per cent, he is, not to put too fine a point on it, robbed of one per cent, and his architect, being *particeps criminis*, is guilty of fraud, has betrayed his trust, and done what he can to discredit his profession." Every honorable architect will acknowledge that this is perfectly true. Among us, we believe that architects suffer more from the annoyance of ill-judged attempts to influence them by offers of unearned fees than their clients do from their yielding to the temptation, but if there should be unfaithful and dishonest ones, the reputation of the profession as well as justice demands that they should be made examples of.

CONSIDERABLE alarm has been excited in Chicago with regard to a disorder of the bowels, apparently epidemic, which is thought to have originated from the use of a cheap kind of oleomargarine, made from uncooked lard. Pork-fat being abundant and cheap in the great pork-packing centres, it is natural that an attempt should have been made to use it for the manufacture of artificial butter, in the same way that beef-fat is employed in other places, but it appeared on trial that the lard on being thoroughly melted lost its "grain," and a better product, so far as appearance went, was obtained with fat nearly in the raw state. Lard, especially when raw, is one of the most indigestible fats, and would alone be likely to cause disturbance of the digestive organs, but physicians fear much worse consequences if the consumption of the porcine butter should become general. To say nothing of the bad effect which pork is thought to have upon scrofulous constitutions, the danger of introducing entozoa into the system by the use of the raw fat is a very real and imminent one. It is true that the cysticerci or embryos of the tape-worm, which form the dangerous element in mealy pork, are large enough to be detected and strained out of the softened lard, but the eggs from which the cysticercus is produced are excessively minute, and might easily be introduced into the fictitious butter. If the number were small, they would do no great harm, as they would not pass beyond the cysticercus stage, but when consumed in large quantity, the number of embryos may be so great as to form, when collected in the soft parts of the body, as is generally the case, large and fatal tumors. There is, again, a strong probability that trichinae may escape into the fat from the fibrous portions of muscle which are separated in the rendering process, thus giving rise ultimately to one of the worst and most fatal forms of disease known.

BUILDING SUPER

THE THIRD AS

VERY soon after these affairs necessary to make another visit execution is rightly begun.

We find the excavation finished the collecting well and pipe complete that part already some five feet started, and thinking it a little point of the work, should have been minutely. The inside face looks little small; but that may be the gravel has been filled in nearly borrow a crowbar and force it in several places. Except a softness it has not been properly rammed enough, so as to pack it closely in of the way until we approach the bar, instead of sinking its full length strikes against the solid rock no and ask him if the foundation was. He hesitates, and finally replies through part of the thickness of top "that it seemed a pity to excavate therefore built up a thin wall against built over the rock to make it on the plans. He adds, with great ing can be better for part of the

This explanation is specious, leading. In a wall so built, the imperceptible seams of the ledge or over its top into the body of the masonry, keeping it constantly damp. Moreover, there is a serious risk that under the heavy weight of the tower, the thin lining wall built up against the ledge, but in no way bonded to it, would separate from it and fall away, leaving the superincumbent masonry most insecurely supported.

There is, besides, the certainty on unyielding rock, and partly mortar, will settle unequally, masonry above, and at least of work must therefore be immediately, and the ledge cut away so a thickness of the cellar wall down inches additional room outside it pointed, and for packing in between intercept and carry safely down ooze through the veins of the profess never to have heard of

Outside Face not intentionally
of Foundation, line of the wall,
Walls, against it, there
selecting stones
plumbing it, to get it vertical; p
pervious. It is true that this is t
it is not, and should not be p
portance, even in dwelling-house
kind.

A wall built in this way (Fig. 30). The joints at the back, the mortar, or if any is put in, it falls so that a gradual compression portion is liable to take place, and of the superstructure increases. The inner face of the wall toward the unfilled cavities next the base the water which trickles down by the duct it into the heart of the masonry the projecting points of the lard imbed themselves in the earth, this freezes and expands, the lifted as if by a number of short locating the joints and making moisture through them. It is more important to have the cellar wall smooth than the inner stones are selected so as to show the joints well filled with cement care as the work proceeds, but obliquely, so as to "weather" (Fig. 30), any moisture which from above, and flows down over it meets a joint, drip off, falling by which it will be conducted so to run down and drip off again

x. — My first personal observation was at the villa of a commercial man in no way concerned in it except a man of remarkable intelligence also one of fine taste and of uncommon sense was built in Queen Anne's time, and to him one day upon the beauty of the principal entrance. He, a hard time with that door. When "Green!" "As green as out-er it was blistered in spots, and I in warm weather, and after two scraped off down to the wood, that would find, after removing three alligany. The paint was very old, and workmen's tools. It had been in the century." I was amazed; but I the taste, which was characteristic sused to imply rudeness. England in one of the old churches of London-aborately carved tomb of a John mostly in a beautiful green-veined red and yellow marble, equally ns, who was kind enough to do the that this tomb as it stands now is once all painted and gilded. The iful stone to the thickness of five-ve found that British critics have e De Longueville Jones, in his de- in Herefordshire, say, "There square apartment, about twice as oak, which some Goth of a squire lennings, in his delightful Rambles iving Charles Cotton's pew in the as was elaborately carved and of good it of green paint at the hands of The taste which covered beautiful ds with paint was Philistine. The d covered the oak were not Phil-

y best of yellow-pine timber is not as good for decks or deck of the South. Before the war of ne grown about Wilmington, N. C., ost pine on our coast, the mean of square then round and in bark, yellow-umber is that in which grain i- nued to the centre or to twenty-five grains to the inch, the specific gravity. There is an ation to the durability of yellow-ecome a heavy stockholder in this position that yellow-pine timber . The consequence has been that ed and filled with this timber, and state of decay it has been used for repairs. This is a very great mis-uld have answered a better purpose shrinkage and durability of yellow-able size, it shrinks but little after used as deck plank, they should be upon a large experience, leads us requires no seasoning to make it turpentine are through the sap, as we say that the capillary tubes of the resinous property if cut at the strength and to render it durable, timber in the private shipyards of ly. We could name ships built in that have their first yellow-pine point to others that have exhibited Proper care should be taken to regards shrinkage in naval vessels, as in private yards, making strakes cause of complaint. The strakes d ceiling of naval vessels are too American Ship.

his life of Frederick the Great, amount of discomport, which was ous aspects, by fitting up a "study" rea of the house," he says in his o one sublime garret-room, lighted y, and at least eleven feet high; pervious to sound, to—in short, to unfortunately, in the making of this was to be had." "The work" of executing, in all its details, was "Father of Lies: such 'work' as I among the sons of Adam till then." rious 'study' was definable as the detestable and despicable bit of ad and odious to me very." The nature," but "swimming as for dear (ultimately did become bankrupt) 'en and upwards, for real mendacity 'nations nominalism, and marcing it experience or conception. "Slant ty" and then, for evermore."—St.

BUILDING INTELLIGENCE.

[Reported for The American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

- 239,311. REFLECTOR.—Charles F. Brush, Cleveland, Ohio.
239,312. The same.
239,317. SASH-FASTENER.—Edmund A. Parker, Meriden, Conn.
239,338. TRANSOM FIXTURE.—Francis V. Phillips, Chicago, Ill.
239,339. VENTILATOR.—Levi J. Wing, New York.
239,362. DOOR-HANGER.—Benjamin F. Blye, Syracuse, N. Y.
239,399. CLAPBOARD-GAGE.—John R. Kivett, Zumbrota, Minn.
239,392. SHUTTER-BOWER.—Henry Leguay, St. Louis, Mo.
239,393. ENAMELLING BRICKS.—John D. Logan, Philadelphia, Pa.
239,408. DOUBLE-LIFT HOIST.—Henry E. Towns & T. W. Capen, Stamford, Conn.
239,444. LATH-CHUCK.—Ambrose Chatwin, Brooklyn, N. Y.
239,451. FIRE-ESCAPE.—Stephen B. Conover, New York, N. Y.
239,469. TILE AND BRICK KILN.—Eben Davenport, Waynesville, Ill.
239,472. SMOKE-CONSUMING FURNACE.—Adam C. Engert, Three Mills Lane, Bromley-by-Bow, County of Middlesex, England.
239,480. CALUMINING CEMENT.—Joshua Holmes, Mount Union, Ohio.
239,473. APPLIANCE FOR DISTRIBUTING SOUND, ETC.—Adam C. Engert, Three Mills Lane, Bromley-by-Bow, County of Middlesex, England.
239,480. CALUMINING CEMENT.—Joshua Holmes, Mount Union, Ohio.
239,512. MEANS OF PREVENTING ESCAPE OF SEWER-GAS FROM WASTE-PIPES.—Willis Knowlton, New York, N. Y.
239,514. SHEET-METAL WATER-PIPE.—James E. Leadley, Camden, N. J.
239,520. MORTICE-LOCK CASE.—Eugene M. Mix and James E. Mix, Buffalo, N. Y.
239,531. DIE FOR CUTTING THE THREAD ON PIPES.—George Murray, Jr., Cambridgeport, Mass.
239,534. HOUSE.—Gottfried L. Norman, Spartanburg, S. C.
239,558. FIRE-ESCAPE.—Charles F. Sands, Jr., Nassau, New Providence, West Indies.
239,572. AUTOMATIC WATER-ELEVATOR.—James H. Taylor, Greenville, S. C.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—The following building permits of importance have been issued since the last report:—

Wm. F. Thiele, 3 two-story brick buildings, on Eutaw St., between Franklin and Ross Sts.
Rev. Franklin Wilson, three-story brick buildings on Vincent St., near Mulberry St.
T. W. Heath & Co., addition and improvement to building on Grindall St., between Johnson and Williams Sts.

C. B. Turner, three-story brick warehouse, 92 Gay St., between Saratoga St. and Falls Ave., 23' x 60'.
Trustees of Thos. Wilson Sanitarium, three-story brick building, e cor. Charles and Saratoga Sts., 18' 6" x 87'.

J. M. Cone, 3 three-story brick buildings on Edmondson Ave., near Mount St.
Rosedale & Co., four-story brick factory on Frederick St., near Fayette.

Mrs. Weisenfeld, 2 five-story brick and stone warehouses, 11 and 13 South Howard St., between German and Lombard, 23' x 105' each.

Frederick Burger, three-story brick building on Canton Ave., near Dillon St.
Bernard Black, two-story brick building on Canton Ave., near Dillon St.

A. Weiskittel, 6 two-story brick buildings on Canton Ave., near Dillon St.

Mr. W. F. Weber, architect, is preparing drawings for a two-story addition, 37' x 53', to the Phoenix factory, at Phoenix Station, U. C. R., of stone.
STORER.—Mr. Wm. F. Weber is also preparing drawings for a two-story brick store and dwell., 22' x 24', for Mr. W. L. Stork, on Wilson St., near Madison Ave.; cost, \$2,300.

WAREHOUSE.—The old brick dwelling 46 Hanover St. is being demolished in order to make room for a four-story brick-and-iron warehouse, 32' x 142'. The building is being erected by Messrs. Newbold & Son.

BANK BUILDING.—The Western National Bank is to build a new banking-building on the site of the present building, on Eutaw St., near Baltimore. The plans are not as yet decided on.

WAGES.—The Journeymen Bricklayers' Society have determined to demand \$3.00 per day, commencing April 15.

Boston.

BUILDING PERMITS.—*Brick.*—No. 461 Columbus Ave., for Geo. B. Taylor, family hotel, 24' 6" x 80', five stories; Thomas R. White, builder.
Citizens' Place. near Columbus Ave., for N. M. Jewett, family hotel, 25' x 131', five stories; Stephen Moxon, builder.

No. 45-51 Charleston St., for Francis Fisk, store, 34' x 43', four stories; Alonzo Bowers, builder.

Dartmouth St., cor. Newbury St., for Boston Art Club, exhibition building, 65' x 90', three stories, pitch roof; Norcross Bros., builders.

No. 283 Roxbury St., for Louis Vrang & Co., boiler, engine and dry house, 34' x 38', two stories; Charles Chipman, builder.

Huntington Ave., near Rogers Ave., for New England Merchants' and Mechanics' Institute, exhibition building, 384' x 532', two stories.

South St., near Essex St., for Benj. W. Nichols, store, 32' x 70', five stories, mansard; Webster & Dixon, builders.

South St., cor. Essex St., for Benj. W. Nichols, store, 27' x 85', five stories, mansard; Webster & Dixon, builders.

No. 238 Marlboro St., for Samuel T. Eames, dwell., 25' x 55', three stories; Samuel T. Eames, builder.

No. 203-215 Washington St., on estate of Chas. O. Rogers, stores and offices, 72' 2" x 72' 0", six stories; Timothy E. Stuart, builder.

Wood.—No. 6 Murray Ave., for Wm. Donaldson, dwell., 16' x 32', two stories; William Donaldson, builder.

No. 663 East Sixth St., for Edmund C. Coleman, dwell., 22' x 34', two stories.

C. St., cor. West Seventh St., for Patrick White, dwell. and store, 22' x 37', three stories; Patrick White, builder.

Bennington St., for Thomas P. McCulpha, dwell., 19' x 25', two stories, pitch; James H. Coffin, builder.

No. 271 Dorchester St., for Wm. Peard, dwell. and store, 22' x 36', three stories, L 12' x 25'; Wm. Peard, builder.

Milmont St., near Elmoro St., for Alden Frink, dwell., 24' x 48', two stories; Charles H. Blodgett, builder.

No. 648-652 East Sixth St., for Richard and Onville Woodson, 3 dwells., 20' x 36', two stories, mansard, L 12' x 14'.

No. 83 White St., for John K. Erskine, dwell., 20' 6" x 51', two stories, mansard; Davis Damon, builder.

White St., for John K. Erskine, dwell., 20' 6" x 44' 6", two stories, mansard; Davis Damon, builder.

No. 247 Princeton St., for Wm. C. Hardy, dwell., 22' x 32', two stories, mansard; J. J. Hamilton, builder.

Baker St., near Wild St., for Martin Luther Orphan's Home, barn, 41' x 81', two stories, pitch; John D. Wester, builder.

Mr. Rowland Ave., near Eldon St., for Geo. A. Valentine, dwell., 20' x 34', two stories, pitch, L 21' x 24'; Wm. Hunt, builder.

Pleasant St., for Roger L. Barstow, stable, 20' x 38', one story, hip roof; McNeil Bros., builders.

Perris St., near Alaska St., for G. H. and W. A. Paine, dwell., 35' x 35', two stories, hip roof, L 20' x 30'.

The following table gives the number of permits issued from the Inspector's office for the first three months of the year:—

Brick.....	49	Boilers.....	110
Wood.....	88	Heating Apparatus.....	43
Special.....	5	Street permits.....	238
Repairs.....	503		
Total.....	1635		

That the building market is on the increase is shown by the statement that the brick permits for the three months of 1881 are in advance of the corresponding three months of any year since 1874, except 1880. Wood permits are in advance of any year since 1878, except 1880. Permits for repairs, alterations, etc., are in advance of any year, and permits for boilers remain the same. The total number of permits issued is greater than for the corresponding time for any year since the organization of the office.

OFFICE BUILDING.—The new building on the site of the Joy's building will be a six-story marble front, for stores and offices. Mr. Fred Pope is the architect.

HOTEL.—Young's Hotel is soon to be enlarged and rebuilt. The old buildings between the hotel and Court St. are to be removed, and a seven-story marble front building erected. The parlor and dining-room will each be 35' x 100'. There will be four private dining-rooms and some seventy-five additional sleeping-rooms. Two stories more are to be added to the present building.

Brooklyn.

BUILDING PERMITS.—*De Kalb Ave.*, n w cor. Debevoise Place, four-story brick store; cost, \$12,000; owner, S. T. Payson, 288 Clinton Ave.; architect, E. D. Norris; builders, Thos. Donlon and Morris & Selover.

Bushwick Boulevard, n e cor. Montrose Ave., four-story brownstone dwell.; owner, E. V. Isbell, 340 Monroe St.; builder, C. Isbell.

Van Buren St., n s, 201' 9" w Throop Ave., 3 two-story brick stores; total cost, \$10,000; owner, M. Evans; architect, S. E. Covert.

Grand St., Nos. 311 and 343, n s, 70' w Tenth St., 2 four-story brick stores; total cost, \$10,000; owner, M. Evans; architect, S. E. Covert.

President St., near Van Brunt St., three-story brick stable; cost, \$4,000; owner, Mr. Kaine, 4 President St.; architect, Geo. Damm; builder, not selected.

Commercial St., cor. Ann St., three-story brick warehouse; cost, \$30,000; owners, Havenmeyer Sugar Refining Co.; architect, H. C. Havenmeyer.

Third Place, n s, 240' w Clinton St., 2 three-story brownstone dwells.; owner, J. J. Williamson, 25 Third Place; architect, F. C. Jones; builder, P. Carlin.

Evergreen Ave., n e cor. Troutman St., 2 three-story frame tenements; cost, total, \$7,500; owner, H. Loeffler, 1923 Stockton St.

Tompkins Ave., n w cor. Stockton St., three-story frame store; cost, \$5,000; owner, Geo. Loeffler, 138 Floyd St.

Hancock St., n s, 220' w Nostrand Ave., 3 three-story stone dwells.; cost, each, \$7,500; owner and builder, Geo. Phillips.

Hovey St., n s, 200' w Lee Ave., 10 three-story stone dwells.; owner and builder, J. F. Ryan, 142 Rodney St.

ALTERATIONS.—*Forest St.*, near Bushwick Ave., four-story brick extension; cost, \$16,000; owner, Rudolph Lipsius, on premises; architect, Chas. Stoll.

Clinton Ave., No. 477, one-story brick extension; cost, \$3,000; owner, J. C. Hutchison, on premises; architect, S. Eylet; builder, J. J. Quinn.

Chicago.

BUILDING PERMITS.—W. Shaefer, two-story brick dwell., 24' x 60', 1089 West Twelfth St.; cost, \$4,600.

K. Hierholzer, two-story brick dwell., 22' x 60', 2700 Shields St.; cost, \$3,500.

J. Lafens, three-story brick dwell., 22' x 72', 2702 South Park Ave.; cost, \$7,000.

Joseph Sack, two-story brick dwell., 24' x 66', 3139 Harmon St.; cost, \$3,000.

W. Case, two-story brick dwell., 21' x 60', 15 Ann St.; cost, \$3,500.

R. Platt, two-story brick dwell., 22' x 44', 274 Leavitt St.; cost, \$3,500.

D. Cameron, two-story brick dwell., 19' x 50', 14 Quincy St.; cost, \$2,500.

G. W. Adams, two-story brick dwell., 23' x 68', 8202 Indiana Ave.; cost, \$5,000.

J. Hadel, two-story brick store and dwell., 24' x 62', 3636 Halsted St.; cost, \$3,500.

C. Hanson, two-story brick dwell., 22' x 42', 824 Roby St.; cost, \$2,500.

A. Martzinger, two-story brick dwell., 22' x 50', 641 North Franklin St.; cost, \$3,000.

BUILDING PERMITS.—Chickolm Bros., two-story brick stores, 50' x 100', 64 and 66 Clinton St.; cost, \$8,000.

J. Sluder, two-story brick dwell., 18' x 60', 2125 Vermon Ave.; cost, \$3,000.

W. C. Fuley, three-story brick store, 27' x 189', 158 West Monroe St.; cost, \$7,500.

G. W. Straight, two-story brick factory, 75' x 100', Centre Ave., near Twenty-Second St.; cost, \$4,000.

Thomas Power, two-story brick store and dwell., 23' x 65', 2925 Archer Ave.; cost, \$5,500.

A. Schubert, two-story brick dye-house, 25' x 80', 360 Seligby St.; cost, \$2,500.

W. C. Leubenstein, four-story brick warehouse, 100' x 100', Michigan and La Salle Sts.; cost, \$26,000.

Mrs. K. Kilmert, 3 three-story brick dwells., 40' x 60', 141 to 149 North Halsted St.; cost, \$10,000.

J. Lamson, two-story brick dwell., 28' x 60', Grand Boulevard and Thirty-Seventh St.; cost, \$12,000.

Henry Rehn, two-story brick dwell., 22' 6" x 69', 624 Wells St.; cost, \$5,000.

Aug. Dethmann, two-story brick store and dwell., 25' x 15', 1128 Milwaukee Ave.; cost, \$6,000.

A. Bauer, four-story brick store, 20' x 72', 424 La Salle St.; cost, \$8,000.

GRAIN ELEVATOR.—The old Rock Island elevator is being torn down, to be replaced by a new one, planned by Mr. Baumann, which will be 85' x 355', will have a capacity of 1,500,000 bushels, and will cost \$30,000.

STORES.—Max Rothschild is building a five-story store for himself, 50' x 180', on the site of the American Express Building; cost, \$70,000.

Cincinnati.

BUILDING PERMITS.—The following building permits have been issued since our last report:—

John Kennedy, double brick, cor. of Scott and Powell Sts., 8 rooms each; cost, \$4,000.

Henry Mixall, repairs on frame house; cost, \$700.

Frank Slevens, brick house, 3 rooms, on Fifth St.; cost, \$7,000. Also brick house on Sixth St.; cost, \$2,500.

Cleveland.

STORES.—Mr. Charles Body is to build a block of 4 stores on Garden St., from plans by Mr. L. P. Eldridge.

Block of stores, cor. Broadway and Hamlet St.; cost, \$8,000; Walter Blythe, architect.

Store for F. Holtworth, Woodland Ave.; cost, \$3,500; W. Blythe, architect.

Messrs. Coburn & Barnum are the architects of stores for J. B. Perkins, Seneca St., cost \$20,000; stores, offices and power building, J. B. Perkins, Seneca and Franklin Sts.; cost, \$80,000.

Houses.—Mr. L. P. Eldridge is to build a two-story brick house for Mr. H. Neidinger.

Mr. Truman Dunham will build on Euclid Ave. a stone house, 68' square; cost, \$30,000; C. H. Gries, architect.

Messrs. Blackburn & Charlot are the architects of a house for Stephen Howland, on Fifth Ave.; cost, \$7,000.

Dwell., for H. P. McIntosh, Superior St.; cost, \$3,500; W. Blythe, architect.

Dwell., for Fred. Diebolt, on Willson Ave.; cost, \$10,000; W. Blythe, architect.

Four houses for Felix Nicola; cost, \$3,500 each; W. Blythe, architect.

Residence for Geo. Warrington, cor. Franklin and Pearl Sts.; cost, \$4,000; W. Blythe, architect.

Messrs. Coburn & Barnum, architects, have in hand:—

Stone house for H. H. Little, on Euclid Ave.; cost, \$20,000.

Stone and frame house, Dr. N. Schneider, Prospect St.; cost, \$10,000.

Frame house, for Judge S. E. Williamson, Prospect St.; cost, \$7,000.

Brick and frame house for L. McBride, Euclid Ave.; cost, \$10,000.

Stone house, for J. H. McBride, Euclid Ave.; cost, \$10,000.

Double stone dwell., for Geo. P. McKay, Prospect St.; cost, \$12,000.

Stone dwell., for F. A. Wyman, Fifth Ave.; cost, \$2,500.

Three frame tenements, detached, for I. P. Lamson, Jennings Ave.; cost, \$2,500 each.

Four frame tenements, detached, for W. J. Gordon, Arlington Court; cost, \$2,500 each.

MAONIC TEMPLE.—Cor. Superior and Bond Sts., stone, 85' x 200'; cost, \$150,000; Walter Blythe, architect.

Milwaukee.

THE OUTLOOK.—Five months solid winter has deterred all building operations in this city that (Continued on next page.)

Dr. Angus Smith, F. R. S., says in his book he believes he has discovered the proper conditions under which the spectra to be able to show "how light, and to find how new it is, and it may be of animals and of plants upon the fact that when light with a small quantity of nitric oxide is brought to the light, and can be measured with great exactness, that may be developed in time of climate. There can be, in sanitary economy without the examination of the air. He has examined, indoors and out of ammonia, it is believed, may be finding a piece of glass anywhere, and with pure water by means of solution to the washing, the air is ascertained. This Dr. Smith has a test for sewer-gases, for fumes, and even of furniture, as of ammonia." In a part of the book upon vegetation, he quotes a saying that thirty-six years had in Paris than as many centuries ago will be still more destructive than Dr. Smith, "we may readily agree as color is concerned, and the (nitric acid). In the conclusion the value of the ammonia obtainable in the process said to be so successful here. If we were to treat the same way, we should have above could be capable of increasing our

is indigenous to Nevada. The trunk a foot in diameter is much about as hard as boxwood, rich red color, and very heavy material for the wood-carver. In boxes for shafting, and in a few battery. Used as a fuel it creates more as ordinary wood would last, and is converted to a charcoal of ordinary wood.—*Timber Trades*

Spanish paper is gathered the following way the jeweller, Sicily and a better world. The under-tomb, as well as his two daughters is married, and the latter is to place to-morrow.—His disconnection.—This bereavement will not be carried on as usual; only our No. 3 Lessi de Linturiers to No. 3 and Lord has raised the rent."

—A writer in the *Co-operativa* paid a visit to the Marlo until his death by Joseph Smith, or family still occupy the hotel, though anxious to see his museum, tried to do it. The objects in it are roots, which abound on the shore which his hotel stands. I place and pretensions, whereas I appearance of a forest of ingenuity. There was nothing tricky about the pictures. Dore never produced a Hebrew who strode through these statements, groups of American started up in the strange under-standings. Dr. Darwin would require for the wonderful creatures—out you everywhere. An American find ample material for a new and of man never conceived such as the work of an old agitator, eightieth year, with no material but his pocket-knife and a pot of his imagination."

the royal, common, or European are natives of the United States, and the ash-leaved walnut; several are known in America by the name of three thrives best if the nuts are dried. Hence Fuller says:—

by beating, or else would not bear

walnut tree, be better by bo."

BUILDING INTELLIGENCE.

[Reported for The American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

- 239,609. HOUSE-MOVING TRUCK.—John Brown, Lorain, Ill.
239,603. APPARATUS FOR DRYING WALL-PAPER.—Culver S. Clark, New York, N. Y.
239,607. JOINT FOR GEMENT ILLUMINATING TILES.—William J. Fryer, Jr., New York, N. Y.
239,608. MACHINE FOR CUTTING CYLINDRICAL FORMS FROM STONE.—James Gazeley, Watervliet, New York.
239,611. BRICK-MACHINE.—Lewis B. Kennedy, Keokuk, Iowa.
239,620. TRANSOM-FIXTURE.—Francis V. Phillips, Chicago, Ill.
239,639. AUTOMATIC FIRE-EXTINGUISHER.—Chas. Barnes, Dayton, Ky.
239,646. HOD-ELEVATOR.—Geo. W. Brown, New York, N. Y.
239,654. ROTARY PLANING-MACHINE.—E. F. Gordon, Concord, N. H.
239,667. STRAINER AND STOPPER FOR WASH-BASINS, ETC.—CHARLES C. PARKER, Brooklyn, N. Y.
239,669. CONSTRUCTION OF BUILDINGS.—James Miller Peck, Flushing, N. Y.
239,676. COMBINED ANVIL, VISE AND DRILL.—Joseph L. Ware and W. Scott Fleming, Pine Island, Minn.
239,696. SASH-FASTENER.—Edwin L. Barber, Larwill, Ind.
239,698. REAMING-SAW.—Ludwig Barthelme, Astoria, N. Y.
239,703. HAND CIRCULAR-SAW.—Albert A. Bennett, Harveyburg, Ohio.
239,705. HOT-AIR FURNACE.—William Blackwood, Jr., Detroit, Mich.
239,710. CROSS-CUT-SAW.—Eben Moody Boynton, West Newbury, Mass.
239,724. HOT-WATER GENERATOR.—James D. Carmody, Evansville, Ind.
239,727. EXTENSION-LADDER.—Edward Caudle, Salisbury, N. C.
239,739. HINGE-JOINT.—James M. Dodge, New York, N. Y.
239,741. STENCH-TRAP.—Patrick W. Doherty, Boston, Mass.
239,762. SHINGLING-GAUGE.—Edward R. Gay, Nevada, Tex.
239,769. AUTOMATIC FIRE-EXTINGUISHER.—Fredrick Grinnell, New York, N. Y.
239,787. HOT-AIR FURNACE.—G. E. Hopkins, Philadelphia, Pa.
239,822. CROSS-CUT-SAW HANDLE.—Irving W. McIntyre, Mount Pleasant, Mass.
239,824. SHUTTER-FASTENER.—John B. Morris, Cincinnati, Ohio.
239,846. PORTABLE FLOOR.—Jacob Ring, Brooklyn, N. Y.
239,852. FASTENER FOR MEETING-RAILS OF SASHES.—Leicester Sargent, New Haven, Conn.
239,866. HOD-ELEVATOR.—James Smith, Philadelphia, Pa.
239,880. EAVES-TROUGH HANGER.—John Stricker, Laura, Ohio.
239,881. MORTISING-MACHINE.—Chas. C. Strong, Chas. Seymour, and David B. Turnbull, Defiance, Ohio.
239,897. SHUTTER-WORKER.—Theodore Wagner, San Francisco, Cal.
239,898. FISH-PLATE.—George H. Waring, Indian-town, New Brunswick, Mich.
239,903. VENEER CUTTING-MACHINE.—Fitzland L. Wilson, Saginaw, Mich.
239,906. DRYER FOR LUMBER, ETC.—Edwin V. Wingard, Vincennes, Ind.
239,909. FOOT-REST FOR REGISTERS.—George W. Woodward, Brooklyn, N. Y.

SUMMARY OF THE WEEK.

Baltimore.

FAIRBANKS.—The Patapesc Chemical Company is building a large three-story factory, 69' x 109', and several out-buildings, on Fort Ave.; boiler-house 40' x 40' one-story high; drying-room 40' x 60', two stories high; cost, \$15,000; Mr. Wm. F. Ferguson, contractor.
WAREHOUSE.—Mr. J. H. Heman is building a three-story brick warehouse, 167' x 56', on Clay St., near Park Ave.; cost, \$14,000; Mr. Wm. F. Ferguson is the contractor.

Boston.

BUILDING PERMITS.—Brick.—Newbury St., near West Chester Park, for Eugene Van H. Thayer, stable and dwell., 22' x 81', two stories; Webster & Dixon, builders.
Commonwealth Ave., near Gloucester St., for Chas. A. Kidder, dwell., 20' x 70', three stories; Standish & Woodbury, builders.

Nos. 238 and 240 Marlborough St., for Henry Whitwell, 2 dwells., 27' x 53', three stories; Keating & Fellows, builders.
Hunt and Oliver Sts., Edw. A. Abbott, store, 60' x 90', four stories; T. J. Whidden, builder.

No. 71 West Broad Square, for Josiah Noyes,

dwell., 21' x 42', three stories; M. S. & O. N. Miller, builders.

Knollwood St., cor. Ulen St., for Boston & Albany R. R. Co., train-house, 118'6" x 44'; A. H. Glover, builder.
Lehigh St., near Broadway Bridge, Estate of W. D. Perry, factory, 60' x 120', five stories; Vinal & Dodge, builders.

Gloucester Place, from 377 Harrison Ave., Estate of James Parker, family hotel, 31' x 60', three stories; James H. Sears, builder.

Nos. 18 and 20 Central St., Barney Corey, store, 22' x 48', four stories; Albert Currier, builder.
Blossum St., opposite McLean St., Massachusetts General Hospital, lodge, 24' x 41'; Benj. F. Dewing, builder.

Wood.—Dorchester St., No. 285, for Wm. Peard, dwell. and store, 25' x 36', three stories; Wm. Peard, builder.

Nos. 665 and 667 East Sixth St., for Wm. T. Eaton, 2 dwells., 18'6" x 32', two stories; Wm. T. Eaton, builder.

Chatham St., off Harvard St., Thomas W. Bicknell, dwell., 31' x 31', two stories; Manuel Silva, builder.

Old Harbor St., near Telegraph St., for Geo. H. Bond, 2 dwells., 16' x 36', two stories; Locke & Nolan, builders.

Nos. 31 and 313 West Third St., for Wm. Priesting, 2 dwells., 18'6" x 56', two stories; Wm. Priesting, builder.

Nos. 685 and 687 Parker St., John Bradnard, 2 dwells., 23' x 26', three stories; Robert D. Ward, builder.

Buffalo.

HOUSES.—North St., near Delaware St., brick dwell., with sandstone and terra-cotta finish; cost, \$30,000; owner, Robert Keating, Esq.; architects, Holmes & Little.

Delaware Ave., nr. North St., brick residence; cost, \$25,000; owner, E. L. Hedstrom; architects, Holmes & Little.

Delaware St., cor. Edward St., double brick house, 56' x 96', with brownstone trimmings; cost, \$29,000; owner, O. P. Hansell, Esq.; architect, E. W. Caulkins, architect.

Mr. J. G. Culler, of Rochester, N. Y., has completed plans for a dwell. for M. J. O. Culler, to be built on Delaware Ave., near Delaware Place; cost, \$10,000.

The Stover Bros. will build twin dwells. on Pennsylvania St., near Eleventh St.; cost, \$7,000. The architect is Mr. B. W. S. Clark, of this city.

A large block, 68' x 183', is to be built, cor. Ellicott and Seneca Sts., for Mr. J. M. Richmond, by Mr. E. W. Caulkins, architect.

STORIES.—Seneca St., nr. Washington, brick store; cost, \$20,000; owner, J. B. Pierce; architects, Holmes & Little.

Seneca St., nr. Louisiana St., block of stores, 38' x 60', to be known as the "Danahoe Block"; cost, \$12,000; architect, C. B. Cook.

Angara St., nr. Morgan St., stores with sandstone trimmings; cost, \$15,000; owner, Geo. R. Potter; architect, C. B. Cook.

Brooklyn.

BUILDING PERMITS.—Orford St., s. s. 160' x Flushing Ave., two-story brick bakery, stable and dwell.; cost, \$6,000; owners, Dahn & Co., Myrtle and Carleton Aves.; architect, R. B. Eastman; builders, R. Carlin and Long & Barnes.

Myrtle Ave., n. w. cor. Tompkins Ave., three-story brick store and dwell.; owner, Robert Porterfield, Cumberland St., cor. De Kalb Ave.; architect, M. Thomas; builders, C. King and M. C. Rush.

Verona Place, w. s. 110' 6" x Mason St., 2 two-story Connecticut brownstone dwells.; cost, \$6,000; owner and builder, David H. Fowler; architect, Chas. Werner.

Macon St., s. s. 160' x Verona Place, 2 two-story Connecticut brownstone dwells., 19' x 42', tin roofs, wooden cornices; owner and builder, D. H. Fowler, 355 Lewis Ave.; architect, C. Werner.

Hall St., w. s. 110' 6" x De Kalb Ave., two-story brick stable, coach-house and dwell.; cost, \$5,000; architect, Chas. Werner; builder, D. H. Fowler.

Monroe St., n. s. 185' x Marcy Ave., and Monroe St., s. s. 200' x Marcy Ave., 7 two-story brownstone dwells.; cost, each about \$1,000; owner, P. C. Vrooman, 414 Gates Ave.

Monroe St., n. s. 185' x Marcy Ave., 3 three-story brownstone dwellings; cost, each about \$5,000; owner and builder, P. C. Vrooman, 414 Gates Ave.; architect, F. DeW. Vrooman.

Fifth and Thirtieth Sts., about 385' x Seventh Ave., five-story brick shop, 50' x 200'; cost, \$45,000; owners, The Ansonia Clock Co.; architect, S. Curless.

Twelfth St., s. s. 250' x Seventh Ave., one-story brick foundry; cost, \$5,000; owners, The Ansonia Clock Co.; architect, S. Curless.

Thirtieth St., n. s. 300' x Seventh Ave., two-story brick vanishing shop; cost, \$7,500; owners, The Ansonia Clock Co.; architect, S. Curless.

Fourth Ave., n. w. cor. Remond St., seven-story brick office-building; owner, A. A. Low, Montague St., and Columbia Heights; architect, J. C. Cady; builders, W. and T. Lamb, Jr., and E. Suelker.

St. Johns Place, n. s. 341' x Seventh Ave., 3 three-story dwellings; cost, \$7,000 each; owner, Wm. Tabbiss, 20 Seventh Ave.; architect, Thos. F. Houghton, 310 Fulton St.

Fourth Ave., s. s. between Ten Eyck and Stag Sts., two-story factory, boiler-house, and engine-room; cost, \$11,000; owners, L. Waterbury & Co., on premises; architect, A. Montgomery; mason, John McQuaid; carpenter, Jenkins & Gillies.

Chicago.

BUILDING PERMITS.—H. H. Hunsake, three-story brick dwell., 22' x 50', 116 Hubbard St.; cost, \$3,200.

Mrs. Menzel, two-story brick dwell., 21' x 50', 757 North Ave., near Thirtieth St.; cost, \$5,000.

F. Deppa, four-story stores and dwellings, 20' x 75', 515 and 517 Seigrist St.; cost, \$11,000; owner, John Anderson Pressed Brick Co., factory, 170' x 230', Webster Ave.; cost, \$5,000.

H. K. Elkins, two-story brick dwell., 41' x 67', Indiana Ave., near Seventeenth St.; cost, \$15,000.

Duke Bakery Co., four-story brick stores, 65' x 180', 183 Adams St.; cost, \$10,000.

House.—Mr. C. S. Luce, of Boston, Mass., is the architect of a house for Alex. J. Leth; cost, \$50,000.

Cincinnati.

BUILDING PERMITS.—Since our last report the following permits have been issued:—

David Sinton, two additional stories on top of present four-story store; cost, \$5,000.

Geo. F. Otto, 3 two-story brick dwellings; cost, \$15,000.

H. G. Stebel, three-story brick; cost, \$7,000.

Mrs. C. L. Anderson, six-story brick; cost, \$20,000.

J. J. Kennedy, two-story brick; cost, \$4,000.

Gro. Kamptz, 2 two-story brick; cost, \$5,000.

Henry Kaiser, 2 three-story brick; cost, \$6,000.

Henry Carde, three-story brick; cost, \$5,000.

Thos. Emery's Sons, five-story brick, s. w. cor. Ninth and Race Sts.; cost, \$10,000.

Thos. Emery's Sons, five-story brick, s. w. cor. Ninth and Elm Sts.; cost, \$12,000.

STRIKES.—The carpenters, brick-masons, and freestone-cutters are all out on strike. The carpenters and freestone-masons have quit work, and the brick-masons will do the same on the first of May unless their demands are acceded to. The strike of the freestone men is for \$3.00 per day, and to have no men of less pay. The bosses will give the \$3.00 per day, but demand a \$2.50 per day grade, as some men are not worth as much as others. The "journs" rejected this proposition, and say that after the first of May the strike will be for \$4.00 per day unless the matter is sooner accommodated. The organizations of both the "journs" and the bosses are strong, and each are determined to hold out, and so every time are looked for.

The strike of the carpenters is for 25 per cent advance. The bosses offered 20 cents advance, but this was rejected. This strike is not so formidable as that of the freestone men and will probably be easily compromised.

No trouble is anticipated at present from the other branches.

New York.

BUILDING PERMITS.—Fortieth St., No. 216 e, three-story brownstone fire-engine house; cost, \$12,000; owner, City New York, 153 and 157 Mercer St.; architects, N. Le Brun & Son.

Oliver St., No. 35, five-story brick tenement; cost, \$15,000; owner, John Meyer, on premises; architect, W. J. Fox.

One Hundred and Third St., n. s. 82' e Third Ave., four-story brick tenement; cost, \$6,000; owner, Peter Astor, 208 East Thirty-Second St.; architect, Bart. W. Otter.

Kingsbridge Road, cor. One Hundred and Fifty-Seventh St., two and one-half story frame dwell.; cost, \$5,000; owner, W. W. Mills, Tenth Ave. and One Hundred and Fifty-Sixth St.; architect, C. Baxter.

Sixty-First St., s. s. 250' x Ninth Ave., four-story brownstone tenement; cost, \$15,000 each; owner, John Moloy, 213 East Forty-Ninth St.; architect, A. B. Ogden.

Thirty-Second St., Nos. 165 and 167 w, three-story brick storage building; cost, \$5,000; owners, E. Martin & Son, 168 West Thirty-Second St.; architect, J. M. Dunn.

Lexington Ave., cor. One Hundred and Second St., 4 four-story brownstone tenements; cost, \$12,000 each; owner, Michael Duffy, 155 East One Hundred and Second St.; architect, A. Spence.

Fifty-Eighth St., n. s. 150' e Second Ave., five-story brick and brownstone tenement; cost, \$18,000; owner and builder, John Livingston, 304 East Fifty-Eighth St.; architect, Wm. F. Burroughs.

Eighty-Third St., n. s. 101' 8" w Second Ave., four-story brick and brownstone tenement; cost, \$12,000; owner and builder, John Livingston, 304 East Fifty-Eighth St.; architect, Wm. F. Burroughs.

Fifty-Ninth St., s. s. 400' w Seventh Ave., seven-story brick and stone apartment-house; cost, \$100,000; owner, John C. Mott, et al., 118 Warren St.; architects, Hubert Fierston & Co.

Eighty-Ninth St., n. s. 210' w Fourth Ave., two-story Ohio stone dwell.; cost, \$18,000; owner, Miss C. Talmann, 34 West Twenty-Seventh St.; architect, H. M. Congdon; builders, Jeans & Taylor.

Broadway, No. 623, rear through to No. 190 Mercer St., five-story iron and brick store; cost, \$70,000; owners, Thomas Lewis, 582 Lexington Ave.; architect, J. B. Suook.

One Hundred and Nineteenth St., n. s. 388' e Ave. A, three-story brick factory; cost, \$13,500; owner, C. W. Hochstetler, Pleasant Ave., n. e. cor. One Hundred and Twentieth St.; builder, Wm. Fernschild.

Twenty-Third St., Nos. 28 and 30 w, and 19 and 21 West Twenty-Second St., six-story brick store and dwell.; cost, \$13,600; owner, Jas. F. Sutton, 6 East Twenty-Third St.; architect, N. M. Cutter.

Fifty-Second St., No. 112 e, two-story brick and brownstone stable; cost, \$5,000; owner, W. B. Baldwin, 119 East Fifty-Seventh St.; builder, E. Corbett.

First Ave., s. w. cor. Seventeenth St., four-story brownstone tenement; cost, \$16,000; owner, Andrew Kelly, 1530 First Ave.; architect, J. C. Burne.

First Ave., w. s. 25' x Seventeenth St., 3 four-story brownstone tenements; cost, \$15,000; owner, Andrew Kelly, 1530 First Ave.; architect, J. C. Burne; builder not selected.

Seventeenth St., s. s. 75' w First Ave., four-story brownstone apartment-house; cost, \$17,000; owner, Andrew Kelly, 1530 First Ave.; architect, J. C. Burne; builder not selected.

First Ave., Nos. 201, 203, 205, 207, and 209, three five-story brick stores and tenements; cost, each \$10,000; owner, L. M. Rutherford; architect, Wm. E. Waring.

Fifty-Ninth St., No. 313 e, four-story brick factory, 312' x 82'; cost, \$10,000; owner, Thomas Crimmins, 252 East Sixtieth St.; architect, W. Schickel.

Fifty-Eighth St., s. s. 250' w Sixth Ave., 4 four-story brownstone dwellings; cost, each \$11,000; owner, John Coar, Ashland House; architects, Thom & Wilson.

(Continued on next page.)

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T FOLIAGE,

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BUI INTELLIGENCE.

St. n Penn St., three-sty store and dwell,
Jno. Rufe, contractor.
St., between Pepper and Wreken Sts., 6 two-
dwell, 18' x 33'; Thos. L. Kelley, owner.
St., n Berks St., 3 three-sty dwell, 16' x
A. Devlin, owner.
High Ave., between Braddock St. and Franklin
St., 2 two-sty dwell, 15' x 46'; Dickson Bros.,
contractors.
Broad St., w Seventh St., 27 three-sty dwell,
Edw. H. Flood, contractor.
St., s Diamond St., three-sty store-house,
Elihu Manufacturing Co., owners.
St., s Buttonwood St., three-sty hotel, 47' x
Mullershon, owner.
St. and Payette Sts., five-sty store, 18' x 148';
McPherson, contractor.
Penn St., e Tenth St., four-sty addition to col-
47' x 48'; Essick & Co.
St., s Diamond St., one-sty foundry
two-sty office and two-sty stable, 18' x 78' and
25'; Stewart & Elbridge, contractors.
First St., s Master St., two-sty ice-house,
brewery and store-house, 40' x 65' and 40' x
Jno. Kramer, contractor.
St., n Franklin Road, 3 two-sty dwell, 16'
E. M. Daniels, contractor.
St., w Coulter St., three-sty dwell, 40' x
M. McConnell, contractor.
St., s Melrose St., three-sty dwell, 16' x
E. S. Lewis, contractor.
St., between Penn and Swanson Sts.,
retort-house, 35' x 35'; Harrison & Co., own-
ers.
St., e Bridge St., three-sty hotel and
dw., 22' x 62'; G. Linnahan, contractor.
St., s Norris St., 2 three-sty dwell, 18' x
W. P. Maires, contractor.
St., s Montgomery Ave., 10 three-sty
dwell, 14' x 16'; Jos. S. Albright, owner.
St., w Thirty-Ninth St., 17 three-sty
dwell, 16' x 50'; G. W. Thompson, owner.
St., s Amber and Dauphin Sts., three-sty dwell, 18'
Jos. McCartney, contractor.
St., s Howard St. and Lehigh St., five-sty factory,
18' x 100'; Jno. McCartney, contractor.
St., s Hancock St. and Montgomery Ave., one-sty
dwelling-house, 16' x 14'; H. A. Miller, contractor.
St., between Fourth and Fifth Sts., four-sty
dw., 20' x 120', and two-sty stable, 12' x 45'; A.
Green & Co., contractors.
St., s Clearfield St., three-sty dwell, 18' x
G. H. W. Keyser.
St., s Penn St. and Patton Ave., three-sty store and
dw., 54' x 56'; J. W. Thewlis.
St., s Nos. 1223, 1225, 1227, and 1229, 4 three-sty
dwell, 15' x 53'; C. G. Harris, contractor.
St., s Bainbridge St., 3 three-sty dwell, 18'
x 40'; Thos. McConch, owner.
St., s Pleasant Ave., 6 Germantown Ave., three-sty
dw., 21' x 30'; A. L. Kohl, contractor.
St., s Lafayette and Adam Sts., 2 two-sty dwell,
x 14'; McLaughlin & McNamara.
St., s Penn and Eagle Sts., three-sty office and
dw., 20' x 25'; Chas. Stewart, contractor.
St., s 4 three-sty dwell, 16' x 36';
Andros
diston, owners.
continued on next page.)

THE AMERICAN ARCHITECT AND BUILDING NEWS.

VOL. IX.

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APRIL 23, 1881.

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THE Chicago Tribune has been indulging in some descrip-
tions of tenement-house life which must have been drawn prin-
cipally from imagination, and are, we are glad to say, as erro-
neous as they are unjust to the class of persons which they
profess to describe. The inspiration of one article is derived
from a fancy sketch in *Puck*, representing a dilapidated struc-
ture swarming with frantic vixens and half-naked children,
standing in a street piled with tin cans, dead cats, and old bones,
among which other citizens wend their way to and from the
rum-shop in the basement. This sad picture is placed in con-
trast with an alluring representation of a village of cottages
situated in the midst of wooded hills, and intersected by an
elevated railway; and the *Tribune* calls upon capitalists to build
some of these delightful villages, to which "the wretched in-
mates" of these "breeding-places of disease and crime" may
be induced by the influence of philanthropic societies to emi-
grate, leaving the filth in which they "prefer to wallow," and
securing pure air and health in the suburbs. This sentimental
view of the subject is very common, and very pernicious, since
it serves only to close the eyes of the charitable both to the
real needs of their poorer brethren, and to the proper means of
supplying them. That a residence in the country is under fa-
vorable circumstances beneficial to health is obvious enough,
but while a clerk who arrives at his office about nine, to leave
it at five, can live ten miles away without inconvenience, the
case is very different with a man who must be ready every
morning with his tools to begin work when the clock strikes
seven, and is only free at six to change his clothes, pack his kit
and start for the train which shall take him home. For such,
the inconvenience of living at a distance is very great, and none
but the most energetic can or will endure it, even for the advan-
tages to be gained, while these advantages are by no means all
that *Puck* paints them. Bad as city tenements are, the cheap
habitations of a crowded and undrained country village are
little better, as the statistics of diphtheria and typhoid fever
amply show; while the loneliness, the lack of recreation, in-
struction, or of opportunity to exercise a choice of associates
which country life often involves, add still more to the dislike
with which even the better class of tenement-house people
regard it. The cheap philanthropy which finds it easy to make
the poor healthy and happy if they would not obstinately refuse
to follow the path laid down for them has had its day, and is
beginning to be succeeded by a disposition to ameliorate their
condition as far as possible where they are. To do this requires
much study, experience, sympathy and intelligence, but it is
the only method which is sure to be successful.

A VERY comprehensive scheme is proposed for a system of
sewerage which shall serve all the towns within ten miles of
Boston, and at the same time prevent the pollution of Charles
River by the drainage from the large and growing towns upon its
banks, by means of two great intercepting sewers, running
parallel with the river-banks, on the north and south sides re-
spectively. These intercepting sewers are to discharge into
Boston Harbor, at what is hoped to be a safe distance from the
shore, and will form the general receptacle with which all the
local systems will be connected. The cost of the main drains

alone is estimated at eight million dollars, but by means of a
device for erecting the whole territory into a "Metropolitan
District," this can be divided among a number of populous
communities. At first sight, the plan seems to have an air of
far-seeing and liberal economy, but considering how small a
part of the necessary drainage systems would be furnished by
these trunk sewers, the burden which their construction would
impose upon the smaller towns is very great. Newton, for in-
stance, which is seriously considering the matter of sewerage,
and has already obtained authority for discharging its waste
into the river, would hardly consent to be taxed a quarter of a
million for its share of a conduit intended principally to pre-
vent the inconvenience which the fouling of the stream would
cause to the people dwelling by its banks lower down, and the
same argument would apply with still more force to the towns
nearer the source.

ANOTHER question is, moreover, suggested by the discussion;
that is, whether it is advisable, in the present state of knowl-
edge, to expend such enormous sums upon conduits for con-
veying into navigable waters the fertilizing wastes of densely
populated districts. In the case of Boston, this question was
somewhat peremptorily decided in the affirmative, but such
sewers as are designed for the Metropolitan District would be
almost wholly for the benefit of the next generation, and there
is, to say the least, a probability that before they are paid for
some means will be discovered of accomplishing the safe and
economical return to the soil of the nitrogenous products of
which it has been exhausted; and that the silting up of harbors
with the most valuable elements of vegetable life will be looked
upon as a preposterous folly. Less than one-fourth of the
towns comprehended in the scheme now possess any sewer sys-
tem whatever, and the intercepting conduits would be entirely
useless to them until their drains were built, years hence, and
compound interest would meanwhile have to be added to the
original outlay to determine the actual cost before they could
be made serviceable. Taking again the city of Newton as an
example, it is safe to say that the interest on such an expendi-
ture, with cost of maintenance, would, by the time its drains
are constructed, form an annual burden far greater than that
necessary for treating its wastes by any method of precipita-
tion or irrigation now practised, and as these processes, at pre-
sent in an almost rudimentary stage, are improved, the cost
would be still less, and the result permanent and satisfactory
in every way, while the maintenance of a huge conduit would
grow more costly every year, and unless additional works were
from time to time undertaken, its effect would only be the in-
evitable accumulation of inconveniences for future generations to
deal with.

THE advance in the prices of building work and materials
shows signs of having been hardly justified by the condition of
the market, and some further adjustment will probably be ne-
cessary before the end of the season. In Chicago, where the
advance was considerable, the result has been to check build-
ing operations very materially, and the capital which was in-
tended for investment in this way has been diverted to other
enterprises. This is a double misfortune for the workmen, who
profit far more by steady employment at moderate wages than
by occasional jobs at a high price; and if the advance of the sea-
son should show an important falling-off in the number of contracts,
the unions, which showed so much good sense in their efforts
to increase rates, will, we hope, be equally ready to make such
concessions as prove to be necessary. Sentimentalism is en-
tirely out of place in such matters, and the cheap talk about
"sharing the prosperity of the rich," "asserting the dignity of
Labor," and so on, which workmen are too fond of indulging in,
might with advantage be replaced by an intelligent collation of
facts concerning the probable demand for men, upon which
terms could be based to the satisfaction of all parties.

THE New York Board of Aldermen has passed resolutions
permitting the United States Illuminating Company, as well as
the Brush Electric-Light Company, to lay tubes and wires in
the streets of the city for conveying electrical currents for
illuminating purposes. As usual in New York, a tax of one
cent per lineal foot is extorted for the privilege of occupying
the streets with the lines. It is gratifying to find that these
companies, whose success in their field of enterprise is now well

THE ILLUSTRATIONS.

LANE THEOLOGICAL SEMINARY, WALNUT HILLS, CINCINNATI, O.
MR. JAMES W. McLAUGHLIN, ARCHITECT, CINCINNATI, O.

THESE buildings are of blue limestone laid in random courses, relieved with Ohio freestone. The central building, 65 feet by 100, completed one year ago, contains the chapel, recitation rooms, gymnasium, and museum. The north wing, 70 feet by 88, is now building, the walls being ready to receive the roof. It will be used as a dormitory building, the study-rooms having bed-rooms attached, separated from the former by screens seven feet in height. The cost of the buildings already finished, and the new wing, will be about \$40,000.

DESIGN FOR A HOTEL DINING-ROOM. BY MR. EDWARD A. LACEY,
NEW YORK, N. Y.

"L. has made fair use of the easy conventionalities of his chosen style, and has presented a room which might have been designed and executed in the last century, if his pilasters had been a little more slender and his ceiling in its decoration more in conformity with constructive necessities. The joists of it (or what stand for joists), alternating in direction in adjacent panels as they do, are not in accordance with usual or practical processes of flooring, and the device has no value as a feature of decoration. It would have been better to have omitted them altogether. The plan needs further explanation, and does not agree with the perspective in the width of the archway leading to the hall. The programme requires the chairs and tables to appear in the perspective, which in effect would have been greatly improved by such furnishing. They are not well bestowed in the plan. The author has presented but a meagre sheet of details, and has not sufficiently committed himself for criticism in this regard. As is the case with most of his competitors, he has not given us the elevated station for the head-waiter. This condition he might have readily met by a step in the sideboard recess, which, by the by, should have contained shelving and cupboard doors. To line the passage to the hall with shelving is not a happy device."

SCOTTISH SKETCHES: LINLITHGOW PALACE; OLD COUNCIL CHAMBER, LEITH; LORD BALMERINO'S HOUSE. SKETCHED BY MR. J. W. SMALL, F. S. A. SCOT.

UNITED BANK BUILDING, NEW YORK, N. Y. MESSRS. PEABODY & STEARNS, ARCHITECTS, BOSTON, MASS.

LEGAL NOTES AND CASES.

Right of Architect to Compensation after a Refusal to allow him to complete his Contract.

THE Supreme Court of the United States, a month since, in the case of *The City of Chicago v. Tilley*, decided upon the right of an architect to compensation for his services, upon a refusal to allow him to complete his contract. The city of Chicago and Cook County agreed to join in building a court-house and city-hall, each to build a certain part of the structure. The county appointed James J. Egan the architect for that portion to be constructed by it, and he entered upon his duties. The City Council, subsequently, August 9, 1875, passed an ordinance which repealed all former ordinances, orders and resolutions of the Council pertaining to the erection and construction of the city's portion of the new city-hall and court-house, and rescinded all former action in relation to the appointment of architects, and expressly provided that "nothing in this ordinance shall be construed as to in any manner affect, or in any wise rescind, impair, or amend any contract or other agreement now subsisting between the city of Chicago and the county of Cook." On the same day the Council passed an order, the material portion of which was as follows:—

"Ordered: That one architect shall be appointed, whose duty it shall be to prepare the necessary plans and specifications for the erection of the city's portion of a new city-hall and court-house, upon block 30, in the original town of Chicago, commonly known as the Court-House Square, and the general exterior design of the same to be of a uniform character and appearance, as shall be agreed upon by said architect and Board of Public Works and said County Commissioners; said architect, when the plans and specifications shall have been prepared by him, and agreed upon by said Board, to take charge of and superintend the construction of said building to its completion under the direction and control of said Board of Public Works, and said architect shall also do and perform every other service or thing necessary to be done, in and about the construction and erection of the city's portion of said building to completion, which shall be required to be done and performed by him as such architect, by said Board of Public Works, and said architect shall receive from the city of Chicago as his full compensation for his entire services as such architect the sum of \$37,500, said sum being 3 per cent of the sum of \$1,250,000, which shall be the entire cost of the city's portion of said building; and such compensation shall be in full for all services of such architect, and no other or further compensation whatever shall be paid to him by said city."

The order further provided that, whenever the plans and specifications should be agreed upon in manner aforesaid, the Board of Public Works shall proceed with the city's portion of said building.

After the passage of this order the City Council proceeded to elect an architect to act under its provisions, and plaintiff was chosen. On August 24, he was officially notified of his election, and on the same day made known to the officers of the city his acceptance of the office, and offered to enter into a written contract and give bonds, but they were not deemed necessary by the city authorities and were dispensed with. Soon after the acceptance of employment by him as architect, under the order of August 9, he proceeded to prepare plans for the city's portion of the building. He made plans for the

several floors or stories of the buildings, consulted with the heads of the various departments of the city government as to the accommodations their departments would respectively need, and from the information thus obtained, made interior plans for the proposed building; and he also prepared designs and plans for the exterior of the building; these plans or designs were exhibited to the members of the Board of Public Works and to the city officers, from time to time, during the months of September, October, and a part of November, 1875. The Board of Public Works proceeded to advertise for bids for excavations for the foundations, and plaintiff prepared the plans and specifications for such excavations, and also prepared plans and specifications for the foundations and sub-basement of the proposed building.

Early in November it was ascertained that the plans of plaintiff and those of Egan for the exterior of the building did not harmonize; and under a resolution of the Common Council, passed November 15, there was a joint meeting of the city and county authorities, at which the architects were present, to consult as to some compromise upon the plans. The architects were directed to prepare a joint compromise plan for the exterior of the building. At an adjourned meeting Egan presented sketches of a compromise plan, embodying the substantial features of the building which is now being constructed, but the plaintiff neither presented a plan, nor concurred in or indorsed that of Egan, which was adopted, and the county authorities proceeded to act upon that plan, as agreed upon. After this action, the plaintiff prepared compromise plans which were considered at a special meeting of the Common Council called to meet on the 13th of January, 1876, for the purpose of considering matters pertaining to the city-hall and court-house, and a resolution was passed, which, in effect, directed the Board of Public Works to adopt the compromise plans of the plaintiff.

After this meeting of the Common Council the plaintiff proceeded to complete his compromise plan, including floor plans for each story, specifications for foundations and sub-basements, and plans for exterior elevation, so that early in the spring of 1876 his plans were so far advanced that he could have proceeded with the construction of the building, and could have had the tracings and working-drawings ready as soon as needed for the progress of the work. He was ready at all times to proceed with the construction of the building, but was not allowed to do so. In the fall of 1876 and spring of 1877, when the City Council determined to proceed with the construction of the building, he offered his services as architect, but they were refused; that is to say, he offered to proceed and perform his part of the contract by supervising the erection of the building when the city was ready to proceed with its construction. On August 27, 1878, plaintiff brought this suit. He declared on the special contract contained in the order passed by the City Council on August 9, 1875, and claimed the contract price for his services, namely, \$37,500. His declaration also contained the common counts for work and labor, goods sold, money lent, etc. The following is a copy of the account appended to the declaration:—

The City of Chicago to Thomas Tilley, Dr.	
For services as architect in preparing plans for the new City Hall	\$25,000.00
For services as architect in preparing a second set of plans with specifications and diagrams for the new City Hall	42,500.00
For services as architect in superintending the building of the new City Hall	42,500.00
	\$110,000.00

The city of Chicago pleaded the general issue. The evidence introduced on the trial of the cause tended to establish the facts above recited. Thereupon the court, among other things, charged the jury as follows: "There is no provision in the contract, or in any subsequent dealings or relations between the parties, that shows how this sum of \$37,500, the compensation that Tilley was to receive for his services, was to be paid, but I think the fair presumption is, inasmuch as it was expected that the erection of this work would extend to a long term of years, perhaps, that the plaintiff was not to wait until the entire completion of the work before he received some compensation, and that he was to be paid from time to time upon some basis to be established, so that when the work was done he should not have received more than the aggregate amount of his compensation. Tilley was employed, like any other employee of the city, to do a certain thing. It was, as far as practicable, to contribute his professional skill, and the suggestion of plans which might or might not be adopted. It may then be considered as undisputed that Tilley was employed to prepare plans and specifications, and did some work in the line of his employment, and for this he is entitled to compensation, as far as possible, at the rate for which he was to do the whole work under the contract; that is to say, he had agreed to prepare plans and specifications and superintend the entire construction of the building for \$37,500. He did a part of that work. He did something in the line of his duty, and if it is possible to ascertain from the proof and contract how much his compensation should be for the work, in the ratio of the entire compensation, the jury should arrive at that."

The city of Chicago excepted to these charges. There were other charges excepted to, but these present all the questions which are raised by the assignments of error. The jury returned a verdict for the plaintiff in the court below for \$13,000, on which the court rendered judgment, and a writ of error was brought to reverse that judgment.

Having with good reason, ever since a variety of kind feelings, oblige, which still continues, to America, I have had from that country, and upability I believe and partly know, that has been hovering in my mind to hereby bequeath the books, what it had to buy and gather; that is, here, which I used in writing. Cromwell be accurately searched for and a President and Fellows of Harvard Massachusetts, as a poor testimony of so many of my transatlantic above indicated toward the great chief school. In which sense I have card authorities will please to accept it and order and use it as to their shall seem fittest. A certain sym- but of intrinsic value, as a collec- very little. If there should be doubt category of this bequest, my dear is always trust and hope, — who al- atter, and who possesses a catalogue counterpart is in the possession of for me in all points accurately done these final directions of mine I wish self — my surviving self. — *Extract*

ties of Italy, France, and Germany. In Florence, for example, and of building construction by which commonest sort are practically five- no timber in the construction of of brick, only one and a half inches in incombustible floor. The United thirty-four years not more than one When a fire did occur, it usually ovi- roof. In Paris, even in the most use is well constructed. The floors used in them is almost fire-proof, and nately less in Paris than in London; is rigorously enforced. Throughout the city of late has been to the Civil Code the legal ants have operated in this direction, the tenant must answer for a fire by accident or superior force, or a fire has communicated from an ad- one is responsible for the damage act, but by his imprudence or negli- milar articles, the landlord or tenant unaccounted is liable to indemnify his loss by the extension of the fire. In a strict building act so rigidly en- from fire. It is worthy of remark masters and other principal officers noteworthy point is that the Berlin case of fire, whether there be any a police report the Attorney-General before a criminal court."

The London Engineer says that the which has introduced this slag as a new offices at its works in Hunslet, window facings, and the ornamental in its own furnaces. A new feature (imitation carved bricks, in various t which is said to be fifty per cent which hitherto has been so much in the Midland and North-eastern Rail- thus, ready prepared for use, in the stations. The Staveley Company for building purposes, much of the the appearance of basalt and other

After three months' work one of the kind on record has resulted in took fire on December 29 and was sel was at first lightened by the re- crets, all openings were then closed, as pumped in by means of immense a began. Two pumps were placed a Tonville capable of pumping out hundred and sixty barrels, each con- the vessel in trim, and on the gradually rose. — *New York Tribune.*

most signs of telegraph wire in the the Kistnah River from hill to hill, high, between Bazarah and Sectun- the over six thousand feet in length, ed in stretching this cable across the

BUILDING INTELLIGENCE.

(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for (under the new system).]

240,217. COMBINED ANVIL AND VISE. — Joseph Allen, Palmyra, N. Y.
240,223. HAND-DRILL. — George D. Belcher, Springfield, Mass.
240,229. HATCHWAY-GUARD. — Victor H. Buschman, Baltimore, Md.
240,245. VENTILATOR. — Christian A. Fredericks, Brooklyn, N. Y.
240,256. MANUFACTURE OF ORNAMENTAL WOOD. — Frederick Kunkel, Grand Rapids, Mich.
240,260. BOLT-FASTENING. — Edward Leslie, Orangeville, Ontario, Canada.
240,274. SHUTTLE-FASTENER. — Benjamin D. Salisbury, Boston, and Henry A. Wilbur, Somerville, Mass.
240,313. CABINET BATH-TUB. — Franklin H. Fickett, Chicago, Ill.
240,316. HAND-SAWING MACHINE. — William W. Giles, Chicago, Ill.
240,339. SWINGING SAW. — William F. Rothenburg, Lincoln, Ill.
240,357. LATCH. — Rudolph Ehmer, New York, N. Y.
240,403. LATCH. — W. Robert Getzler, Chicago, Ill.
240,457. BRICK-MACHINE. — Henry D. Phillips, Baltimore, Md.
240,458. BORING-MACHINE. — Salmon W. Putnam, Fitchburg, Mass.
240,494. FLOORING-CLAMP. — Orville O. Woodruff, Killingworth, Conn.
240,495. SAW-DOWN FASTENER. — Ezekiah R. Young, Meriden, Conn.
9,675. (Re-issue). MODE OF HANGING AND FASTENING DOORS. — M. N. Earl, Los Angeles, Cal.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS. — Forty-three building permits have been issued since the last report, the following only being of sufficient importance to be mentioned:
Messrs Samuel and Geo. D. Appold, 8 three-story brick buildings, Calvert St. and between Lanvale and Townsend Sts.
Bernard Frieseman, 2 three-story brick buildings, William St. between West and Cross Sts.
Chas. Froush, rebuilt three-story brick warehouse, Thames St., near Broadway, 35' x 135'.
West End Baptist Mission, one-story brick church, n e cor. Baltimore St. and Fulton Ave.
J. M. Cone, 5 three-story brick buildings, Division St. cor. Bloom St.
Daniel Eldman, 3 three-story brick buildings, Pennsylvania Ave., between Baker and Chapel Sts.
J. M. Gerkins, three-story brick building, Boyd St., between Poppleton and Anny Sts.
J. Schrufer, three-story brick building, Forrest St., between Eager and Traxton Sts.
J. W. and J. Q. McAtee, 2 three-story brick buildings, Bidale St., near Aleghu St.
James McLean, 2 three-story brick buildings, Granby St. and between Gough St. and Central Ave.
P. Hanson Hies, five-story brick warehouse, n e cor. Park Lane and Church Alley.
HOUSES. — Mr. E. G. Lind is preparing drawings for the following buildings:
Four three-story houses on Maryland Ave., for Messrs. F. Murdoch and John E. Semmes, 18' x 60', of brick and stone; cost, about \$1,000 each.
Nine three-story houses on Lanvale St., for Mr. J. R. Partridge, 16' and 18' x 70', of brick and marble; cost, about \$4,000 each.
Eight three-story dwellings, on Lanvale St., for Mr. H. E. Baltzell, 18' and 20' x 50', of brick with Ohio-tone finish; cost, about \$1,500 each.
FIRE ESCAPES. — Mr. John S. Hogg, Inspector of Public Buildings, has decided to place iron stairways on the outside of such school-buildings as are not provided with the proper means of egress in case of fire or accident, the City Council having appropriated \$10,000 for that purpose.
HOSPITAL. — A communication has been sent to the City Council asking for an appropriation to make the necessary repairs to the Marine Hospital buildings; but it has been decided to erect new buildings on the site of the new Quarantine at Hawkins Point, and the plans are now being prepared.

Boston.

BUILDING PERMITS. — *Brick.* — Harrison Ave., cor. East Lemox St., for Hayward P. & Thomas Hall, tenement-house, 38' x 170', four stories.
Wood. — Centre St., cor. Weld Ave., for Eben Murray, dwell., 24' x 32', two stories; William Keefe, builder.
Fuller St., near Milton Ave., for Chas. B. Fox, 2 stables; Henry P. Oakman, builder.
Sarin St., near Tepalo St., for William Barton, dwell., 22' x 31' 6"; Wm. Barton, builder.
No. 126 Meridian St., for David H. Blaney, dwell., 22' x 32', two stories; S. D. Kenney, builder.
Hartford St., near Sargent St., for Alonzo P. Clifford, 26' x 31', two stories; Alonzo P. Clifford, builder.
No. 112 Norfolk Ave., for Pearson Corlidge Co., store-house, 25' x 90'; Wm. Morse, builder.

Market St., near Winship Ave., for Butchers' Slaughtering and Smelling Association, store-house, 36' x 36', three stories; Kelley & McKinnon, builders.
Trull St., near Hancock St., for Franklin King, dwell., 30' x 35', two stories; Edw. McKechnie, builder.
Warren St., cor. Gaston St., for Thomas F. Furber, dwell., 42' x 44', two stories; Mr. Shapleigh, builder.
Hancock St., near Glendale Ave., for S. Parkman Dexter, dwell., 28' x 33', two stories; Edw. McKechnie, builder.
Hancock St., near Glendale Ave., for S. Parkman Dexter, dwell., 22' x 35', two stories; Edw. McKechnie, builder.
Albion St., near Brighton Ave., for John W. Hollis, dwell., 24' x 32', two stories; Jacob W. Berry, builder.
Wagoners. — Plasterers' wages have advanced from \$2.67, last year's price, to \$3 a day at present; roofers range from \$2 to \$3.50, composition roofers receiving about \$2.50.
Y. M. C. A. BUILDING. — The new building fund of the Young Men's Christian Association now amounts to over \$145,000.

Brooklyn.

BUILDING PERMITS. — *Eighty-five.* w s, 75' n Sackett St., three-story brownstone dwell., cost, \$7,000; owner, Jaus Beveridge, 1222 Fulton St.; architect, A. Hill.
Cumberland St., No. 192, e s, 385' n De Kalb Ave., four-story Connecticut brownstone dwell.; owner, Chester M. Foster, 320 Cumberland St.; architect, M. J. Morrill; builder, J. Lock.
Booper St., n s, 100' e Bedford Ave., 2 three-story brownstone dwell.; cost, \$5,000; owner, E. M. Rawson, 5 Eighth St.; architect, G. H. Girard; builders, J. H. Whittier and D. W. L. Moore.
Sackett St., n s, 125' e Marcy Ave., 5 four-story brownstone dwell.; cost, \$8,000 and \$7,000; owner, Isabella Gordon, 2 Willow St.; architect, R. Dixon; builder, J. Gordon.
New York Ave., n w cor. Bergen St., three-story brick dwell.; cost, about \$18,000; owner, Jas. D. Carpenter, Bergen St.; architect, W. B. Dittmars; builders, J. Ashfield & Son and C. L. Johnson.
Gates St., n s, 100' e Marcy Ave., 5 four-story brownstone French flats; owner and builder, Edwin G. Lewis; architect, D. T. Atwood.
De Kalb Ave., s s, 250' e Lewis Ave., 2 three-story brick dwell.; owner, E. L. Atwood, 984 De Kalb Ave.; architect, D. T. Atwood.
President St., s s, between Smith and Hoyt Sts., 6 three-story brownstone dwell.; owner and builder, C. Bedell, 337 Smith St.; architect, The Pearson.
Halsey St., s s, 80' e Arlington Place, 4 three-story brownstone dwell.; cost, each \$6,000; owner and builder, H. Phillips; architect, J. H. Reynolds.
Lee Ave., s w cor. Hewes St., 3 three-story brownstone dwell.; cost, each \$6,000; owner, P. F. O'Brien.
Hancock St., n s, 350' e Bedford Ave., 6 three-story brownstone dwell.; cost, each \$7,000; owner, S. E. C. Russell, 558 Grand Ave.
Fulton St., No. 861, three-story brick store and dwell.; cost, \$4,000; owner, A. S. Robbins; architect, J. Platte; masons, J. De Mott & Son; carpenter, J. Platte.
ALTERATIONS. — *Columbia Heights.* No. 202, six-story brick extension; cost, \$3,000; owner, R. T. Dush, on premises; builders, H. O'Brien and W. F. Underhill.
Clinton Ave., w s, Vanderbilt Ave., e s, between Atlantic and Fulton Aves., 2 one-story brick extensions; cost, \$1,000; owner, St. Luke's Church; architect, F. G. Withers; builders, J. Locke and W. V. Rae.
HOUSE. — For Mr. T. R. Wilkinson, on Herkimer St., a house to cost about \$3,000 of brick and terra-cotta, is to be built from designs of Mr. J. C. Cady, of New York.

Chicago.

BUILDING PERMITS. — D. Grant, two-story brick dwell., 22' x 31', 2 Little St.; cost, \$3,000.
A. Crisp, two-story brick dwell., 16' 6" x 60', 3148 Groveland Ave.; cost, \$3,000.
U. P. Smith, 2 two-story brick dwells., 50' x 62', Lake Park Ave., near Thirty-third St.; cost, \$18,000.
P. Buttrick, two-story brick dwell., 21' x 44', 360 North Paulina St.; cost, \$1,800.
J. F. Davis, three-story brick store and dwell., 60' x 70', 802 West Madison St.; cost, \$10,000.
D. Sauer, three-story brick dwell., 27' x 72', La Salle St., cor. Chicago Ave.; cost, \$9,000.
J. Koltz, three-story brick dwell., 24' x 72', 540 Wells St.; cost, \$7,800.
E. Lange, two-story brick store and dwell., 25' x 68', 348 State St.; cost, \$3,000.
E. J. Lehman, one-story brick addition, 84' x 110', rear of 191 to 203 Dearborn St.; cost, \$6,000.

Cincinnati.

BUILDING PERMITS. — Since our last report the following building permits have been issued:
Rochus Holt, two-story frame, n e cor. Court and McLean Sts.; cost, \$3,100.
Henry Hanna, four-story brick, s w cor. Betts St. and Central Ave.; cost, \$12,000.
Henry Hanna, three-story brick, Main St., between Seventh and Eighth Sts.; cost, \$6,000.
Hathal & Park, 2 two-story brick, Liberty St. and Western Ave.; cost, \$1,000.
Chas. H. Dummhoff, two-story brick dwell.; cost, \$6,000.
Henry Powell, three-story brick dwell., Mt. Auburn; cost, \$10,000.
Cuvier Club-House, three-story pressed brick, on Longworth St., between Vine and Race Sts.; cost, \$28,000.
Eleven permits for repairs; cost, \$2,925.

New York.

BUILDING PERMITS. — *One Hundred and Thirty-third St., n s, 225' e Eighth Ave., 6 three-story brownstone dwell.; cost, each \$9,000; owners, Sigler & Bradley, 604 First Ave.; architect, Geo. H. Sigler; builder, H. Sigler.*
Fifty-fifth St., Nos. 430 and 432, 2 five-story brownstone tenements; cost, each \$10,000; owners

and builders, Moran & Armstrong, 439 East Fifty-seventh St.

Houston St., No. 106, w cor. Thompson St., five-story brick and brownstone store and tenement; cost, \$10,000; owner, Henry Thole, 55 Charles St.; architect, Wm. F. Waring.

Fifty-eighth St., n s, 225' e Ninth Ave., 2 five-story brownstone tenements; cost, each \$28,000; owner, F. Maginn, 30 West Sixtieth St.; architect, W. H. Cauvet.

Leonard St., n e cor. West Broadway, six-story iron store; cost, \$125,000; owner, The Central Real Estate Association, 246 Broadway; architect, C. M. Slade; builders, W. G. Slade and J. Smith.

Twenty-ninth St., No. 156, e 2 two-story brick stores and dwell.; cost, each \$7,700; owner, Wm. Hawkins, 602 Broadway; architect, J. M. Dunn; builders, Riker & Harber.

Spring St., s e cor. Greene St., six-story brick store; owner, Wyllys Blackstone, 102 Broadway; architect, H. Fernbach.

Forty-fourth St., Nos. 226 and 228, seven-story brick and brownstone tenement; cost, \$60,000; owner, Emilio Buch, 222 West Forty-sixth St.; architect, Jas. Stroud; builders, Wm. Wellington and Wm. Bedell.

Grand St., No. 106, six-story brick and stone warehouse; cost, \$30,000; owner, Stephen T. Hopkins, 104 East Forty-third St.; architect, C. G. Haight; builder, D. H. King, Jr.

Grand St., No. 500, four-story brick tenement; cost, \$8,000; owner, George Raab, 804 Lexington Ave.; architect, Wm. Graul.

Grand St., No. 522, cor. Sheriff St., four-story brick tenement; cost, \$9,000; owner, George Raab, 804 Lexington Ave.; architect, Wm. Graul.

Fifth Ave., 75' x 5' n Sixty-sixth St., four-story brownstone dwell.; cost, \$40,000; owners, A. J. Johnson and D. J. Jardine, 1262 Broadway; architects, D. & J. Jardine.

Duane St., n e cor. Caroline St., six-story brick storehouse; cost, \$21,000; owner, A. K. Ely, 103 Gold St.; architect, John McIntyre; builder, W. J. O'Connor.

First Ave., n e cor. Thirty-eighth St., four-story brownstone stores and tenements; cost, each \$17,000; owner, Henry Weiler, 436 East Tenth St.; architect, Jno. Brandt.

Broadway, n e cor. Houston St., six-story iron store; cost, \$275,000; owners, F. Mayer and S. Levy, 39 White St. and 472 Broadway; architects, H. J. Schwarzmann & Co.; builder, J. Schiffin.

First Ave., n w cor. Thirty-eighth St., five-story brick factory; cost, \$40,000; owner, Geo. Ehret, Fourth Ave. and Ninety-fourth St.; architects, H. J. Schwarzmann & Co.; builders, J. L. Weber and H. Schiffer.

Thirty-eighth St., n s, 65' w First Ave., 2 five-story brick stores and tenements; cost, each \$10,000; owner, Geo. Ehret, Fourth Ave. and Ninety-fourth St.; architects, H. J. Schwarzmann & Co.; builders, J. L. Weber and H. Schiffer.

Leonard St., No. 128, five-story brick tenement; cost, \$16,000; owner, Lawrence O'Brien, 83 Barclay St.; architect, Wm. Kuhler; builder, J. L. Murtha.

Beekman St., s w cor. Nassau St., nine-story brick and granite and fire-stone office-building; cost, \$400,000; owner, Eugene Kelly, 33 West Fifty-first St.; architects, Silliman & Farnsworth; builder, Richard Deves.

Twenty-second St., s s, 200' w Seventh Ave., seven-story brick and stone apartment-house; cost, about \$50,000; owner, J. G. Hyatt, 556 West Twenty-third St.; architect, H. J. Dudley.

Sixtieth St., s s, 250' w Broadway, 2 five or six-story brick tenements; cost, \$25,000 and \$65,000; owner, Margaret Crawford, Wakefield, N. Y.; architect, A. B. Ogden.

Washington St., Nos. 674 and 676, five-story brick refrigerating building; cost, \$50,000; owners, Beadleston & Woerz, 258 West Tenth St.; architect, A. Pfund.

Eighteenth St., Nos. 334 and 338, w 2 five-story brownstone tenements; cost, each \$20,000; owner, Walter F. Shibley, 20 Nassau St.; architect, W. H. Hume.

One Hundred and Thirty-fourth St., n s, 156' e Alexander Ave., three-story brick dwell.; cost, \$4,000; owner, James Maguire, Room 18, Cooper Institute; architect, J. M. Dunn.

Pearl St., No. 369, cor. Hague St., six-story iron and brick factory; cost, \$10,000; owner, Edward B. Cobb, Tarrytown; architect, Mr. Osterander; builder, W. A. Carsey.

Lexington Ave., Nos. 436 and 438, five-story brick and brownstone tenements; cost, \$60,000; owner, Michael O'Reilly, 110 East Forty-fifth St.; architect, C. O'Reilly; builders, O'Reilly Bros.

Fifty-ninth St., s s, 325' w Sixth Ave., seven-story brick and Bedfordstone tenement; cost, \$80,000; owner, Sarah J. Sadal and others, 162 West Forty-ninth St.; architects, Hubert, Pirson & Co.

Ace, A, n w cor. One Hundred and Twenty-second St., three-story brownstone dwell.; cost, \$10,000; architect, J. H. Valentine; builder, C. Johnson.

Ace, A, s s, 17' 10" n One Hundred and Twenty-second St., 3 three-story brownstone dwell.; cost, each \$8,000; owner, John H. Gault, 210 West Fifty-third St.; architect, J. H. Valentine; builder, C. Johnson.

Ace, A, w s, 65' 10" n One Hundred and Twenty-second St., 4 three-story brownstone dwell.; cost, each \$9,500; owner, John H. Gault, 210 West Fifty-third St.; architect, J. H. Valentine; builder, C. Johnson.

One Hundred and Twenty-second St., n s, 68' 10" w Ave. A, 2 three-story brownstone dwell.; cost, each \$9,500; owner, John H. Gault, 210 West Fifty-third St.; architect, J. H. Valentine; builder, C. Johnson.

One Hundred and Eleventh St., s s, 100' e Lexington Ave., 3 three-story brick dwells.; cost, each \$9,000; owner, Ann M. Jenny, 220 East One Hundred and Fourth St.; architect, J. H. Valentine.

One Hundred and Thirtieth St., n s, 125' e Third Ave., 3 four-story brick flats; cost, each \$9,000; owner, Ann M. Jenny, 220 East One Hundred and Fourth St.; architect, J. H. Valentine.

(Continued on next page.)

THE prospect of a World's Fair in New York two years hence is rapidly fading away, notwithstanding the offer which is said to have been made by some railroad company, to buy the Main Building at Philadelphia and transport it in sections to New York, to be set up there for renewed use. This economical plan has its merits, and it would be easy to remodel the great structure so completely as to save it from anything of a second-hand look; but the general apathy with which the project has come to be regarded, due, perhaps to the prolonged discussions among its promoters, presages its total abandonment, especially since the time is already so advanced that it would be very difficult to carry out the necessary operations of construction before the appointed day. A rather unexpected turn has been given to the thoughts of those who interest themselves in such matters by a proposition of General C. B. Norton, who has, by his official connection with the more important of the great expositions since 1876, gained an extended knowledge of the circumstances necessary to their success, that the next international fair should be held in Boston, in 1885. It happens that two independent, and in some respects rival corporations, the Mechanics' Charitable Association and the New England Manufacturers' and Mechanics' Institute, are at this moment erecting immense buildings, both fronting on Huntington Avenue, and less than a third of a mile apart, intending to use them for occasional exhibitions; and General Norton proposes to connect these two permanent structures by a vast temporary gallery, approaching in dimensions the Main Building of the Centennial Exhibition, the materials of which might, indeed, be used for the purpose; thus obtaining a well arranged series of suitable and spacious halls at a minimum of expense, and in a situation singularly central and accessible. Boston has of late years been sinking so contentedly into the position of a third-rate city that its inhabitants will be perhaps more surprised than any one else to learn that General Norton considers it, by its situation with regard to ocean transportation, as well as its facilities for communication with all parts of the Western Continent, to be a peculiarly favorable place for such an enterprise, while the manufactories of New England would alone furnish a respectable and interesting show.

CONTRACTS have actually been made for the second great bridge which is to cross the East River from New York to Long Island. The Brooklyn suspension bridge having proved to be unfit for railway use, a second bridge, intended expressly for steam trains, had begun to seem almost a necessity, and in order to secure as much stability as possible, a point was some years ago selected at which it would be practicable to divide the span by several piers. The New York end of the bridge will be at Seventy-seventh Street, crossing to the coal dock at Blackwell's Island in one span. A second pier stands on the eastern shore of the Island, from which the bridge extends to a point near the Long Island shore at Ravenswood, gaining the firm land by another short span. By means of the bridge close connection will be made between the Long Island Railroad and the New York Central and New Haven lines. There has been a rumor of projected improvements at Montauk Point, near the eastern end of Long Island, by which this little fishing settlement would be made a stopping-place for ocean steamers both eastward and westward bound, bearing the same relation to New York that Queenstown now does to Liverpool, or that Milford Haven is intended soon to occupy toward London; and possibly the new bridge may play a part in this scheme.

THE "Monroe-Hayes doctrine," as the newspapers persist in calling a rather obscure collection of somewhat unmeaning phrases, has been under consideration again in the United States Senate, where a resolution has been proposed, and is likely to be adopted, announcing that the interests of the people of this country are so involved in the subject of the construction of ship-canals across the Isthmus of Panama that their Government formally declares its intention to insist that its consent is a necessary condition precedent to the execution of any such project, and that it must also be consulted in regard to the regulations under which other nations may participate in the use of such canals or other means of communication. The adoption of this resolution is said to be rendered necessary by the progress of M. de Lesseps's operations at Panama. Perhaps we underrate the dignity of the United States Senate, but it seems to us at least possible that M. de Lesseps might hear of the passage of this resolution, and yet venture to go on digging as if nothing had happened; and in such a case it looks as if the

United States would have to accept one or the other of two alternatives,—either to coerce him and his constituents by force of arms to accept the regulations that it saw fit to impose upon him, which, if M. de Lesseps chose to resist, and to call his own Government to his aid, would be a somewhat serious undertaking; or to let him go on, and say nothing more about it, which would simply make our Government ridiculous.

AN interesting competition is now in progress in Paris for the new monument to commemorate the Constituent Assembly of 1789, to be erected at Versailles on the ground once occupied by the hall where the Assembly met. The official programme, after giving some general directions as to the disposition of the design, required that the pedestal should be adorned with statues of Mirabeau, Sièyes, Bailly and La Fayette. As usual in French monumental work, a sculptor and an architect were associated in most of the designs. The preliminary competition resulted in the choice of ten sketches, whose authors were invited to submit more detailed studies of their designs, comprising a model of the whole monument, at a scale of one-tenth the full size, and two models, at one-third the full size, of the figures of Mirabeau and the embodied Republic. All those participating in the second competition are paid something for their trouble. The author of the work adjudged the best will receive a prize of thirty thousand francs, and has the prospect of being commissioned to carry out his design; those which take the second, third, fourth and fifth rank are entitled respectively to prizes of twenty thousand francs, fifteen, ten and five thousand, while the others receive four thousand each. As might be expected, the ten designs thus selected out of more than fifty sketches are of distinguished excellence, and the final judgment will be looked for with interest.

AN enormous immigration seems likely to be the distinguishing feature of the present year. Up to the close of the last month, the total number of arrivals in New York since the first of January was upwards of one hundred and five thousand, or nearly one-third more than during the corresponding period of 1880; while the lines of freight steamers which ply between Boston and Liverpool have brought many thousand more in the same time. Generally May is the month when the largest immigration of the year takes place, and as the winter in Europe has been unusually long and severe, it is more than probable that the preparations of those intending to take the voyage have been delayed, and that the flood-tide of the movement will be later in the season than usual. A single line is said to have made contracts to transport sixty-five thousand persons from a certain district on the Continent, and many of the Irish are ready to fly from the disorders which threaten their own country. It is impossible to witness this remarkable transfer of human beings from the old world to the new without reflections which, though serious, in sympathy with the preoccupied anxiety expressed on the faces, browned by Atlantic winds, that now meet us at every turn in the two great seaports, are for the most part comfortable and reassuring. The character of the new citizens is better than ever before; the great majority bring with them some property, and what is still more valuable, the habits of industry and prudence which the possession of property implies; and little beyond this is needed to make their arrival a presage of new prosperity and honor to the Republic, and, we hope, of success and happiness to themselves.

STRIKES continue to be heard of in all directions; the building trades leading, as is to be expected at this season. Some of the more brutal and lawless unions have joined the movement, with the usual result of arousing by their conduct a strong public feeling against their respectable and rational fellows as well as themselves. In Chicago, the employees of the various railroads centering in the city replied to a voluntary offer of advanced pay on the part of the companies by leaving their work in a body, breaking up trains, and assaulting the engineers who endeavored to proceed with their duty; concluding their performances by resolving to allow no more freight trains to leave the city. Whether the owners of the freight will accede patiently to this arrangement remains to be seen, but we have serious doubts on the subject. The public mind was wrought to such a pitch of exasperation by the outrages against persons and property which accompanied the last great railway strike that it will be many years before any similar attempts of irresponsible laborers to extort a few dollars for themselves by enormous injury to innocent parties will be tolerated.

BEFORE his next visit, let a light steel rod; steel wire in diameter can be obtained five feet long, which answer as before: first a tour around a survey of the materials inside. The concrete piers should be completed and the footings are nearly all in, the exterior, or aisle walls, is three the clerestory foundation section is also started, and the ready. We notice dust on the wise appears well mixed, and consistency, as ordinary sand and rubbing it on the hand, composition. If it contains to crumble away. We direct the surface of the piers before otherwise the two layers will

Outside the aisle walls were built up. This is cust hole dug to satisfy ourselves pointed as we directed. If the wall thoroughly wet, and If all is satisfactory, we will gravel filling as fast as it is difficult to get, the gravel. In a clayey soil, the filling of the excavated material, but at least for the lower part.

As we pass around the but from which the walls are built by cords stretched between the hanging at intervals serve to the far-bottom where the men are be examined to see that the if these are correct, we must laid exactly to the lines so given mistakes in these respects a remedy afterwards. It may in a wall have been built inward after rectified, the mason either on one side or the other. Any such work should be immediately from the bottom. A respect on the part of the superior greater troubles afterwards.

So far as we observe, the good; the horizontal joints are

Bonding. nial bond, and thickness of the wall. (Fig. notice where vertical joints came above the other (Fig. 32) to three or four successive courses should at once have ordered

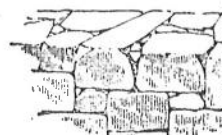


Fig. 31

torn down and rebuilt, but to watch the men from time working. The acquaintance formed will save much time quarters to look most shafely tentional shirking, and well expect intelligence, faithfulness

As we pass along by the distance haranguing his companions seems to have a flow of words he hastily shovels up a trowel side him, and throws them down him, then dashes a quantity over. To all appearance, his neighbors' work, but our suspicious approach and thrust the steel supply wire insinuates itself a meeting now and then with the tar, but penetrating many wires are instantly detected by the same result, and as mason

BUILDING INTELLIGENCE.

(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

240,497. COVERING FOR STEAM-PIPES, ETC.—ISAAC H. BABCOCK, Lockport, N. Y.
240,505. CANT-DOG.—MILTON C. CANTRELL, Harrison, Ark.
240,521. MOULD FOR MAKING CEMENT PIPES.—JOHN MASTEN, Milwaukee, Wis.
240,537. DIVIDER.—EDWARD SOETBEER, New Bremen, Ohio.
240,575. HAND RATCHET-DRILL.—ISAAC N. CHERRY and ROBERT N. CHERRY, Jersey City, N. J.
240,603. GROUND-COVERING FOR PAVEMENTS AND CELLAR-BOTTOMS, OF GLASS.—CHRISTOPHER W. McLEAN, Chicago, Ill.
240,605. MANUFACTURE OF BRICK.—JACOB MILLER, Allegheny, Pa.
240,609. CANT-DOG.—EDWARD A. PEASLEY, Painesville, Ohio.
240,625. RAIL-FASTENER.—WILLIAM G. VESSELS, Kentland, Ind.
240,619. STEAM-HEATING APPARATUS.—THOMAS BONNER, New York, N. Y.
240,661. SAWING-MACHINE.—THOMAS J. CRUMP, Buena Vista, Tex.
240,689. CURTAIN-FIXTURE.—CHAS. E. FRITZ, Onondaga, N. Y.
240,704. EARTH AND ROCK DRILLING MACHINE.—PHINEAS HELM, St. Louis, Mo.
240,718. HOLLOW BUILDING-BLOCK.—CHARLES H. HOUGHTON, Perth Amboy, N. J.
240,724. WOOD-PLANING MACHINE.—JEPPÉ JEPPESEN, Froyo City, Utah.
240,729. CLAMP FOR SLATE ROOFS.—JOHN O. JOHNS, Washington, D. C.
240,736. MEANS FOR ATTACHING RAIN-SPOUTS TO BUILDINGS.—JEREMIAH W. LEADS, Philadelphia, Pa.
240,742. ARTIFICIAL STONE.—GEO. W. MASON, Sharon, Pa.
240,745. FIRE-PROOF PAINT.—ORION B. MELICK, Bloomsburg, Pa.
240,751. FIRE-ESCAPE LADDER.—SILAS R. OWEN, St. Joseph, Mo.
240,769. SHUTTLE-FASTENER.—JOSEPH W. PEARSON, Newton, Mass.
240,761. COMPOSITION FOR ROOFS, ETC.—DARWIN D. PENNYMER, Dover, N. H.
240,768. ANNUCLATOR.—DAVID ROUSSEAU, New York, N. Y.
240,782. HOISTING-APPARATUS.—JOHN GEORGE SPEIDEL, Reading, Pa.
240,790. FIRE-EXTINGUISHING COMPOUND.—MAX WINDSPERGER, 125 Saffron Hill, Holborn, County of Middlesex, England.
2,664. (Glasgow.) DEVICE FOR MAKING WATER-TIGHTS.—ROBERT CUNNINGHAM, Chicago, Ill.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—Thirty-six building permits have been issued since the last report, the following only being of sufficient importance to be mentioned:—

THOS. KENNETT, three-story brick warehouse on Falls Ave., near Eastern Ave., 32' x 40';
SAMUEL TAYLOR, five-story brick building on Pratt St., between Albemarle St. and Falls Ave., 29' x 94';
HUGH McVEY, three-story brick building on Hillen St., between Forrest and Eden Sts.
GERMAN AMERICAN BANK, one-story brick bank-building, 173 Broadway, between Canton and Eastern Aves.
F. A. SCHLUTTER, three-story brick building, on Bond St., between Thames and Lancaster Sts.
BARBARA SCHULTZ, two-story brick addition to dwelling, Central Ave., between Eager and Chase Sts.
LEWIS WAGNER, three-story brick building, a w. cor. Patapsco and Barton Sts.
WILSON & HUNTING, two-story brick building, a w. cor. Falls and Canton Aves.
PIERS.—The Universal Produce and Fish Exchange has concluded a contract with Benjamin Glenn for the construction of two piers at Hooper's Wharf, Fell's Point, each to be 175' long and 80' wide.
SCHOOL-HOUSE.—The School Commissioners have leased the lot of ground, 74' x 219', cor. Charles and Ostend Sts., for the purpose of building, at an early date, a new school-house for the English German School No. 2.
CHURCH.—The old Strawbridge & M. E. Church, n. e. cor. Linden Ave. and Middle St., is to be sold, and a new church to be built on a site northwest of the present church. The plans have not yet been adopted.

Dwellings.—MR. GEO. A. BLAKE is building a dwelling-house for Mr. Frederick M. Colston, on St. Paul St., between Chase and Eager Sts., 25' x 55', three stories high, to be of pressed brick with brownstone finish; cost, \$15,000.
MR. GEO. A. BLAKE is also building a house for Mr. Geo. Latrobe, on St. Paul St., near Middle, 49' x River stone finish; cost, \$15,000.

MR. JOHN HEURY KEENE, JR., is about to build a house on the n. e. cor. of John and St. Paul Sts., 20' x 70', of pressed brick with brownstone finish; Mr. CHAS. E. CASSELL, architect.

Boston.

BUILDING PERMITS.—Wood.—Allston St., near Brighton Ave., for John W. Hollis, dwell., 24' x 32', two stories; Jacob W. Berry, builder.
Woodward St., near Dorchester Ave., for Mrs. Martha B. Abbott, 3 dwells., 21' x 32', three stories; Horace Manson, builder.
Mitt Fourth St., Nos. 303 and 303½, for John P. Mullen, 2 dwells., 20' x 36', three stories; John P. Mullen, builder.
West Fourth St., No. 305, cor. D St., for John P. Mullen, dwell. and store, 20' x 36', three stories.
Forest Hills St., near Green St., for A. D. Weld, Jr., stable and carriage-house, 33' x 41'; John D. Wester, builder.
Saratoga St., near Riverside Ave., for Eli W. Hoyt, store-house, 32' x 77', three stories; Charles H. Brown, builder.
Medford St., No. 231, for Clark & Smith, dry-house, 18' x 109', two stories; Geo. Barker, builder.
East Second St., No. 520, Jones & Cook, store-house, 20' x 140'; Holbrook & Harlow, builders.
South St., near Commercial St., for D. J. Cutler, 2 store-houses, 37' x 109' and 25' x 60'; J. H. Wilder, builder.
Garden St., near Spring St., for Highland Ice Company, ice-house, 67' x 100'.
Plymouth St., No. 65, for Henry Pfaff, stable, 31' x 136'; Frank Schell, builder.
Dorr St., near East St., for Christopher Blake, manufactory, 35' x 85', three stories; Wm. H. Lee, builder.
Webster Ave., near Cambridge St., for Ebenezer A. Hollis, 2 dwells., 20' x 40', two stories; Henry M. Perry, builder.
Green St., near Forest Hills St., for Owen Cassidy, dwell., 24' x 32', three stories; F. J. Tobin, builder.
Sparhawk St., near Murdoch St., for Edward C. Sparhawk, dwell., 34' x 38', two stories; Samuel N. Davidson, builder.
Monmouth St., near Dudley St., for Benj. B. Converse, dwell., 24' x 37', two stories.
Norfolk St., No. 41, for Nathan J. Cottle, dwell., 21' x 30'; Samuel F. Towle, builder.
Millet St., near Wheatland Ave., for George E. Savory, dwell., 23' x 31' two stories; John Horsfield, builder.
Elmore St., near Wilmont St., for Chas. A. Dean, 2 dwells., 20' x 46', two stories; Chas. H. Blodgett, builder.
Green St., near Dale St., for Bean & Abbott, 4 dwells., 20' x 30', three stories; 5 dwells., 20' x 30', two stories; Benj. F. Bean, builder.
Brick.—West Dedham St., No. 80, for Thomas Ray, tenement-house, 25' x 40', four stories; Ripley & Stearns, builders.
Beacon St., No. 274, for Francis L. Higginson, dwell., 65' x 75', three stories; Norcross Bros., builders.

HOUSES.—Messrs. Rotch & Tilden are architects of 2 brick and stone houses for Dr. H. C. Haven, to be built at the corner of Commonwealth Ave. and Exeter St. They will be three stories high, with mansard.

THE PAST MONTH.—During the month of April there have been issued 34 permits for brick buildings 100 for wooden buildings, 260 for additions and alterations, 34 for boilers, furnaces, etc., 33 notices of intention to put in heating apparatus, 176 permits for use of streets, 24 special for wooden buildings; a total of 449 permits.

Brooklyn.

BUILDING PERMITS.—Schermerhorn St., s. e. cor. Hoyt St., 4 three-story brownstone dwells.; cost, each \$8,000; owner, A. P. Preterre, 130 West Twenty-second St., New York; architect, J. Correja; builders, John De Mott & Son and W. H. Noy.
Hoyt St., s. e. 316' x Schermerhorn St., three-story brick dwell.; owner, A. P. Preterre, 130 West Twenty-second St., New York City; architect, J. Correja; builders, J. De Mott & Son and W. H. Noy.
Underhill Ave., w. between Wyckoff and Warren Sts., three-story brick tenement; cost, \$15,000; owner, Caroline Philcox, Underhill Ave.; builder, J. H. Townsend.
Townesson St., s. s. 112' x Sixth Ave., 5 two and three-story brownstone dwells.; cost, each \$5,500; owner, Mary Magilligan, 30 St. Mark's Place; builder, John Magilligan.
Sackett St., s. s. 262' x Sixth Ave., 4 two-story brownstone dwells.; cost, each \$5,000; owner, Mary Magilligan, 30 St. Mark's Place; builder, John Magilligan.
Eighth Ave., s. e. cor. Seventh St., two-story brick dwell.; cost, \$15,000; owner, George Engle, 115 West Forty-sixth St., New York; architect, R. B. Eastman; builders, T. B. Rutan and E. Denington.
Ave York Ave., No. 46, three-story brick flat; cost, \$6,500; owner, J. R. Wood, 76 New York Ave.
Jefferson St., s. s. 100' x Nostrand Ave., 27 four-story brownstone flats; owner, architect, and builder, Geo. W. Brown, 728 Fulton St.
Penn St., s. s. 50' x Marcy Ave., 3 two-and-one-half-story brick dwells.; cost, each \$5,000; owners and builders, Jenkins & Gillies; architect, W. H. Gaylor.
Twenty-third St., s. s. 125' x Richards St., one-story brick fountry; cost, \$3,500; owner, Robt. A. Cheesborough, 110 Front St., New York; architect, J. H. Kelly; builders, J. W. Crawford.
Halsey St., n. s. 13' x Stuyvesant Ave., 2 two-and-one-half-story brownstone dwells.; cost, \$5,000; owner, D. G. Chapman, 92 Sixth Ave.; architect, etc., John Erickson; mason, J. Matthews.
ALTERATIONS.—Willow St., No. 127, two-story brick extension; cost, \$5,000; owner, L. Thomas, 127 Willow St.; architect, etc., E. H. Burnett; mason, J. W. Campbell.
Atlantic Ave., No. 139, raise extension two stories, etc.; cost, \$3,000; owner, Joseph O'Brien, 151 Atlantic Ave.; architect and builder, W. H. Murphy.

DEPOT.—For the Brooklyn & Newtown Railroad, a brick depot, 290' x 215', founded by Stockholm, the Keith and Central Aves., to be built at a cost of \$120,000, from designs of Mr. Ed. E. Rahl, of New York.

Chicago.

STORE.—Messrs. Wheelock & Clay are preparing plans for a four-story store on Wabash Ave. and Jackson St., for J. L. Coburn, Esq.
HOUSES.—A double house for R. S. Burger, to cost \$4,000, is to be built, cor. Goethe and State Sts., by H. M. Hanson, architect.
BRICK-WORKS.—Buildings and kilns costing \$25,000 are to be built by the Chicago Anderson Pressed Brick Co.

Cincinnati.

BUILDING PERMITS.—Since our last report the following permits have been issued:—
G. H. Griever & Co., one-story stable; cost, \$3,600.
Mrs. H. Kolschulte, three-story brick, Pearl St., between Plum and Elm Sts.; cost, \$4,000.
J. W. Cotterall & Co., three-story brick, 133 Everett St.; cost, \$5,000.
J. W. Cotterall & Co., two-story brick, Seventh St., E. side St.; cost, \$3,000.
Jos. Longworth, five-story brick store, Second St., between Elm and Plum Sts.; cost, \$15,000.
Fred Merker, four-story brick, Harriet St., near Front St.; cost, \$2,000.
W. C. Peale & Bro., four-story brick, 334 Central Ave.; cost, \$3,500.

Denver, Col.

BANK-BUILDING.—Messrs. Nichols & Canman are the architects of the new stone building, 50' x 67', at the cor. of Larimer and Seventeenth Sts., for the Colorado National Bank; cost, \$65,000.

STORES.—Hon. G. G. Symes is to build a block of stores, 100' x 125', cor. Champo and Sixteenth Sts.; cost, \$50,000. Messrs. Nichols & Canman architects.
SCHOOL-HOUSE.—The corner-stone of the new brick High School building was laid April 23. Only one wing, 77' x 107', two stories high, about one-third of the building is to be built this summer, at a probable cost of \$60,000. R. S. Roesschlaub, architect for the Board of Education.

New York.

BUILDING PERMITS.—Forty-fifth St., Nos. 319, 321 and 323 e, 3 five-story brick tenements; cost, \$40,000; owners, Anna Ruppert, et al.; 1639 Third Ave.; architect, W. Kuhles; builders, C. Eberspacher and Grissler & Fausel.

Forty-sixth St., No. 312 e, five-story brick tenement; cost, \$13,000; owners, Anna Ruppert, et al.; architect, W. Kuhles; builders, C. Eberspacher and Grissler & Fausel.

Ninth Ave., s. w. cor. Seventy-ninth St., 6 four-story brownstone dwells.; cost, each \$8,000; owner, architect and carpenter, Christian Blinn, 106 West Fifty-second St.

Broadway, Nos. 162 and 164, six-story sandstone and brick office-building; cost, \$18,000; owners, F. F. A., Allan and Henry Marquand, 21 West Twentieth St.; architect, R. M. Hunt; builders, D. Campbell & Co. and Morton & Chesley.

Forty-sixth St., No. 316, five-story brick tenement; owner, W. K. Thorn, 135 West Sixteenth St.; architect, J. I. Howard.

Madison Ave., s. e. 62' x Eighty-fourth St., four-story brownstone dwell.; cost, \$21,000; owner, J. P. Walsh, Madison Ave., s. e. between Eighty-fourth and Eighty-fifth Sts.; architect, J. McIntyre; builder, Mr. Bowen.

One Hundred and Twenty-fifth St., s. s. 160' x Fifth Ave., 4 four-story brownstone dwells.; owner and architect, E. L. Pierson, 57 Third Place, Brooklyn; builder, F. C. Merry.

Seventy-first St., No. 106, five-story brick apartment-house; cost, \$16,000; owner, P. Wlenor, 114 Seventh St.; architect, Wm. Jos.

Sixty-third St., s. s. 175' x Fifth Ave., 4 four-story brownstone dwells.; cost, \$40,000 and \$50,000; owner, Anthony Mowbray, 104 e Eighty-fifth St.; architects, Lamb & Wheeler.

Fifty-first St., No. 329, w. four-story brownstone flat; cost, \$15,000; owner, H. C. Folkman, 798 Tenth Ave.; architect, W. Kuhles.

Eleventh and Twelfth Aves., Thirty-fourth and Thirty-fifth Sts., 26 two-story brick market buildings; cost, \$115,000; owner, New York Central & Hudson River R. Co., Fourth Ave. and Forty-second St.; builder, Joseph Richardson.

Grand St., s. e. cor. Norfolk St., five-story brick tenement; cost, \$20,000; owner, S. Bacharach; architect, Wm. Jos.

One Hundred and Twenty-seventh St., s. s. 125' x Sixth Ave., 6 three-story brownstone dwells.; cost, each \$12,000; owner, Sutherland & Taylor, 129 West One Hundred and Twenty-eighth St.; architect, M. C. Merritt.

Eighty-third St., n. s. 25' x Madison Ave., 5 four-story Connecticut brownstone dwells.; cost, total, \$110,000; owners, Messrs. Murphy & Co., 155 East Forty-fourth St.; architects, Babcock & Meavoy.

First Ave., n. w. cor. Seventy-second St., 4 five-story brick stores and tenements; cost, \$50,000; owners, Messrs. Dwyer & Fee, on premises; architects, Babcock & Meavoy.

Seventeenth St., Nos. 332 and 334 e, 2 five-story brick tenements; cost, each \$15,000; owner, Samuel D. Folson, 135 Second Ave.; architect, Julius Roekell.

Third Ave., n. e. cor. One Hundred and Nineteenth St., five-story brick store and tenement; owner, John Miller, 2180 Third Ave.; architect, Bart. Walther.

Fourth Ave., w. s. 67' 11" x Sixty-ninth St., 3 four-story brownstone dwells.; cost, each about \$25,000; owner, Wm. A. Hankinson, 215 West Thirty-first St.; architects, Lamb & Wheeler.

Ninety-seventh St., n. s. 151' e Fourth Ave., four-story brick tenement; cost, \$11,000; owner, William Smith, 39 Nassau St.; architect, A. Spencer; builders, C. Keys and F. Dwyer.

First St., No. 99 e, extending through to Houston St., five-story brick stable and tenement; cost, \$17,000; owner, John A. Dinkel, 239 East Fifth St.; architect, W. Kuhles.

(Continued on next page.)

SE.—The works at the Eddystone lighthouse, the masonry up to the fifty-eighth level, has been completed, the light of the old tower; thus the light from the old tower over a very small distance there would be a new course. It was intended in the first instance by placing a second level as that in the old tower, so in the limit of the dark arc. There bridge from one tower to the other, and might have communication between, is not to be carried out, and the light notice to mariners that there is a new light. The fifty-first course, which was completed, is the crane-room, and completes the fourth apartment completed is the crane-room, and a window, one facing south and the other in from either one side or the other. The three rooms below the roof of the rocks known as the Eddystone Lighthouse three and four it and Looe Island. At low water water upon them. Although this is a fair weather, yet in rough weather in the trough of a sea, much less can be ironclad. This subsidiary light is named, and when in the vicinity of the light itself, are being careful occupation for the men when in. In external appearance the new lighthouse, from the old both as to height and as to uniform granite, like the old itself is to be a modification of the old. The light of a fixed white light. The light itself is a powerful light, showing two successive flashes of duration divided by an eclipse of light being followed by an eclipse of the visible all round the horizon, but will be seen in clear weather seven-eighths of visibility will overlap that of the old, eight miles of darkness. Out of the light, the tower will consist, over the present rate of progress and the excursionists will be informed by public ready for the exhibition of a light

ROOM.—"Probably you have a house. He was engaged to decorate the price was no object to the owner, a Whistler. One day a friend asked him that was nearly completed, and this is what we saw on entering: on a mattress in the middle of the room, a half-dozen long bamboo butte close at hand, and a very slender, dressed wholly in black velvet, stopping just below the knee, black with silk ties more than six inches on his back, fishing-rod in hand and diligently putting some finishing on the other end of the fish-pole. Double glasses like some astronomer held a nearer and better view of the paint-brush at the other end of the fish-pole, said he, to risk myself by hand off my shoulders trying to see the difficulty and annihilate space so of his fish-pole. And such a room! no, ornamented solely with an enormous peacock's feathers. It was a room to be as if all the peacocks in the world, and were about to smother one in a celebrated 'peacock room' about afterword."—Correspondence of the

Official records it appeared that in 1870 of from £10,000 to £10,000 a year. Less than thirty-five sail of the fine vessels were completely disabled by loss of missing ships of which no account. A four-masted ship called the *Beaver*, Straits of Malacca, and her powder-bottom with all her crew save three, 1870 a powder-magazine in Brescia, in 1870 pounds of gunpowder was struck great part of the city were shattered buildings were buried in the ruins. In the Island of Rhodes, in which a large number of people were killed, the city was struck by lightning, and the tower with a large part of the city in inhabitants were killed.

performed for an owner on his di

covers a considerable period of parties previously referred to are should be allowed in estimating to be prolonged as many years. receives payment by instalments, or more. The dates for these general contract, are seldom made "men," nor is the true amount known to the public.

"men" are thus prevented from value of the work, and the chances to the contractor to satisfy the therefore trust to chance, and

secondary parties to a contract, owner or the general contractor. responsibility of an owner under the maining in his hands at the time parties holding the claims sharing the owner some delay in the final pense; but it is unfair to the sub- . It puts them in the same position putting a premium upon cheap con- there should not be money enough and of the contractor's creditors.

The claims of journeymen and once in two weeks; they are for sh would not seriously embarrassordinates twenty days after the papers, their claims can be ad- work in progress. Few men of tion, or are willing, to exceed this er from the owner. The last man and chance with all the others, as r should be held back thirty days, own by architects.

to protect the sub-contractors and ing either the owner or the con- interested to an amount nearly if . Take, for instance, a dwelling- builder in which the mason-work of stop mason-work is a heavy who a of the general con- best way to prevent the difficulty e contract and independent pay- ot work well in practice. Owners,

but one contract; many of them get their works executed more hen but one contractor is employed, extras, those bugbears of owners experience that when several con- here is no one to come in at the oulds. Some one breaks the plas- e did his work all right and is not s is broken by that mysterious in- make good the loss but the owner? right to a lien on a building or in- commencement of the works until pletion of the contract, we seriously . The owner would be obliged, in f money sufficient to meet all such f the contract and days of grace. to be for the law to require that, formance of the works for which tractor must give the owner writ- the benefit of the lien law, accom- of the various items comprised in ey were performed, together with With this notice and schedule be- how to act in the premises, and if can be adjusted before payment is are protected, and the contractor

If deemed advisable, a contract may have power to retain a per- a certain number of days after it owner against any lien filed at the wo were a general rule, a builder, in proper allowance was made to cover

ated in a somewhat similar way. ing any materials at the request of ritten notice to the owner, accom- quantities, describing all the goods benefit of the owner. These ac- ticularly when an architect is com- manded out as above will also prove rest in another way. The jury ill would be sent to the owner, set- to various qualities and brands of . These materials are frequently

entirely different from those contemplated by the specifications — are a regular "give-away," in fact.

To protect the owner, the notices should be sent to him through the office of the city or town clerk, as the case may be. The notices should be made out upon printed forms, and bear the signature of the clerk, and of even date with the application for a lien. A false claim for benefit under the law would be at once discovered. The contractor, if he had already paid the claim in full, could easily prove the same, either by receipts or witnesses, and the laws covering the rendering of false accounts would take care of the applicant. To protect the interests of an owner residing in a distant city or State, the notices should be sent to his architect or resident agent, who in the premises exercises the authority of an owner. The several parties to a contract protected as above, or in some other way having in view the same end, the last payment could be made over to the contractor thirty days after the completion of the contract, without danger of any future claims upon the owner.

A jerry builder, tendering for work under such a system, must make his proposal high enough to cover all honest demands upon him and leave a fair margin for profit, or he must do his work as best he may, and when he applies for a payment he will perchance find that the whole amount is already covered by liens.

To further protect himself from annoyance and from liens in excess of the amount of the contract, the owner must, as I have said before, discriminate between men as well as prices. Before entering upon an important work, he should acquaint himself with the standing of all the parties concerned. No greater obstacle could be thrown in the way of a confirmed jerry than a perfected lien law, protecting alike the interests of the owner, contractor, sub-contractors, material men, journeymen, and laborers. The passage of such an act by the General Assembly of this and every State would be hailed with satisfaction by the great mass of honest contractors and long-suffering material men. "Honest pay for honest work," should be the motto of all professions and trades. Whatever we can do to enhance such a state of things will be time and labor well expended.

Geo. C. Mason, Jr., F. A. I. A.

LEGAL NOTES AND CASES.

Compensation of Architects. — Offers and Prizes for Plans. — Prize awarded. — Superintendence of Plan adopted. — Ownership of Plan, after Acceptance. — Evidence. — Custom of Architects. — Services.

THE Supreme Court of the United States, in March, decided the case of *Tilley vs. The City of Chicago and County of Cook*. The points involved are clearly set out in the following report of the case:—

Thomas Tilley, an architect, sued the city of Chicago and the County of Cook, in the United States Circuit Court, N. D. of Illinois, in an action of assumpsit, upon the following account:—

The County of Cook and the city of Chicago to Thomas Tilley, Dr. For services as architect in preparing plans, drawings, specifications, diagrams, estimates, and details for the new court-house and city-hall, and superintendence of erecting the same, 5 per cent on \$2,900,029, the estimated cost of the building, the plan being that known as "Eureka". \$145,481.45

The defendants pleaded the general issue. The County of Cook owned Court-House Square in Chicago, upon which a city-hall and county court-house was to be built; and the County Commissioners and City Council, in July, 1872, each adopted a resolution authorizing the building committees of the several boards to "offer a prize of five thousand dollars (\$5,000) for the best plan, two thousand dollars (\$2,000) for the second, and one thousand dollars (\$1,000) for the third best plan for a court-house and city-hall, to be erected jointly by the County of Cook and the city of Chicago, upon the public square in the city of Chicago, the said plans to be submitted to respective boards, in conjunction with the Board of Public Works of the city of Chicago." In August, 1872, the City Council and the County Commissioners each passed an order providing for a joint contract for the erection of the building, and this contract was executed by the city and county authorities. Under this contract the general exterior design of the building was to be of such uniform character and appearance as might be agreed upon by the respective boards. The contract further provided as follows: "3. That portion of the said building situate west of the north and south centre line of said block shall be erected by the city of Chicago at its own expense. 4. The city of Chicago shall occupy that portion of said block west of the said centre line for a city-hall and offices incidental to the administration of the city government, and for no other purpose whatever, except as hereinbefore provided. 5. Each of the parties will heat, light, and otherwise maintain and furnish its own portion of said building." In November, the building committees advertised for designs, and in the advertisement declared that, in order to secure suitable designs, the city and county offered the following premiums: for the best design, \$5,000; for the second best, \$2,000; and for the third best, \$1,000; and it provided:—

"Each design must have a device or motto marked on each drawing, and be accompanied by a sealed letter giving the name of the author, which will be opened after the final award is made, only for the purpose of ascertaining the names of the successful architects and for the return of the unsuccessful drawings to their authors. Each competitor

will give the cubical contents of his building, and an estimate of the cost of the same complete."

Designs were submitted by a large number of architects, and the building committees of the City Council and the Board of County Commissioners made a report awarding the prizes. The plaintiff in error, who had adopted for his drawing the word "Eureka" as the device or motto to distinguish it, was awarded the third prize, of \$1,000. On August 4, the County Board, and on August 18, 1873, the City Council, adopted the following resolution:—

"That the report of the majority of the joint committee awarding the prizes for plans of court-house and city-hall shall be concurred in and the award confirmed, provided that nothing herein or in said report contained shall be construed as indicating a preference for either of said plans as to which shall be finally adopted, from which the said building shall be erected."

The plaintiff in error was paid the thousand dollars awarded to him as a prize. Afterwards, on August 25, the County Commissioners, and on October 10, 1873, the City Council, adopted the following resolution:—

"That the plan known as 'Eureka,' or number 5 (five) in the collection, submitted for court-house and city-hall, be, and is hereby, selected and adopted as the plan after which to build such court-house and city-hall (the Board of Commissioners of Cook County concurring), subject to such change and modifications as may hereafter be determined upon by the Common Council of the city of Chicago and the County Board, provided the estimate of the architect who presented said plan as to the cost of construction of the building shall be verified."

Upon the trial of the case, the testimony tending to establish the facts above recited having been given in evidence by the plaintiff, he was sworn as a witness in his own behalf, and testified that he was an architect of fifteen years' standing, that he had made the design designated by the word "Eureka," and that, after the passage by the City Council and Board of County Commissioners of the resolution last above mentioned, he had verified the cost of the construction of the proposed building in the way customary and usual with architects, which was made up at the rate of thirty-five cents per cubic foot for the building, and was endorsed by fourteen or fifteen architects. The plaintiff produced before the jury all his plans for which the prize had been awarded him. He offered to prove their value, and offered to prove the time employed and expense incurred in the preparation of them. The court excluded the evidence so offered.

The plaintiff further offered evidence to establish that by the usage and custom of architects, in the absence of a special contract, the superintendence of the construction of a building belonged to the architect whose plans were adopted. This was also excluded.

The plaintiff also offered evidence to prove that by the usage and custom of architects, where prizes for plans were offered, the plans of the successful competitors belonged to them, and, if subsequently adopted as the plans to build by, were always paid for in addition to the prize itself. To this defendants objected, and the court sustained the objection.

The plaintiff also offered evidence to establish the value of the services rendered in verifying the cost of the proposed building according to the "Eureka" plans, to which the defendants objected, and the court sustained the objection.

This was all the evidence given or offered to be given in the cause. The plaintiff then rested his case; whereupon the court directed the jury to find for the defendants. The jury so found, and judgment was entered for the defendants. Tilley thereupon carried the case to the Supreme Court of the United States to reverse this judgment.

Judge Woods delivered the opinion of the court as follows: It will be observed that no evidence was introduced or offered to show that the plans of the plaintiff were used by the defendants, or either of them, or that the building for which they were used was ever erected. It is clear that if the plaintiff has any right of action it must arise on the resolutions adopted by the Board of County Commissioners, August 25, and the City Council, October 10, 1873. All that had taken place before those dates was the making of a contract between the city and the county, by which they agreed to join in the erection of a public building in the Court-House Square, each party to build and pay for its own part of the structure; an offer by the city and county of three prizes for the best plans; an award of the prizes by which the third prize, of one thousand dollars, was given to the plaintiff in error, with the distinct notice that "the award should not be considered as indicating a preference for either of said plans as to which should be finally adopted from which the said building should be erected," and the payment to and the receipt by the plaintiff of the prize awarded him. By the payment to the plaintiff in error of the prize, the defendants discharged every obligation due from them to him arising out of the preparation of plans for the proposed building. Upon that payment being made, no contract whatever, either express or implied, existed between the plaintiff and the defendants. If, therefore, the plaintiff had any right of action against defendants, it must have arisen by reason of the adoption of the resolution just mentioned and what was done by plaintiff after its adoption. The resolution was the voluntary act of the City Council and County Commissioners. It was not a proposition, but simply the expression of a purpose to build their structure after the plans of the plaintiff, subject to such changes and modifications as might thereafter be determined upon by the Common Council and the County Board. The resolution was not adopted at the instance

respondent writing the *Philadelphia* at: The most entertaining of all old cities of which is San Miguel's, the place in the year 1697. But if Banded in 1882, which would give us two the present age of the walls, as they to the town by the Pueblo Indians in position, in view of the fact that too fond of the hard labor incident walls of adobe. The truth is, anything inflammable in the building, their work of destruction complete. Then days, gave the besieged ample personal effects, which, as a consequence, was restored by the Spaniards year 1710, at which time it is supposed, "together with much more, were brought back and placed in the city of the paintings is shrouded in to the very early paintings in oil is to the brother, a member of the, when taking down the pictures, were upon one the following inscription: plausible translation being that, while A. D. 237 indicates Anno that it was customary to omit the that they were brought from Spain Antonio de Espino to this country in the gallery will also claim attention in Spain, as its size would indicate a us than its species is known to grow in the carved this building. The Peninsula erected his servant, 1750. The the Vergara, with the date of restoration, and on the following hypothesis: The action of architect with that of soldier, natural that greater honor would be by future generations should they or than restorers. Every indication correct: either the year 1882 (Bans the date of erection; the roof ded by the Marquis de la Penula in and beam over the chancel, 170 churches which will repay the trouble. The first is St. Francis. It is a shape of a cross, having three altars, the main hall or building, the arm of the cross, the apse, the apse of the Catholic designs of artificial flowers in wax, floritas who seek the blessings of a dirt floor. The walls are decorated with elegant worth and evident antiquity, image of the Wise Men of the East, and "The Ascension." A group of the vicarious sufferings of Christ, Getsemane to the one vividly por soldierly "when the stone was rolled rection and the Life." I could obtain determine the age of either paintings our beautifully toned bells, inscribed, ed on the mud roof in much the same an would hang his home-made grime weather, and in the most splendid liner" edifice, however, will soon lose by an elegant stone structure, which tion for sixty years. The time of for forty years. It is fairly presum- will not be present at the dedication.

CHATEAU.—Have you ever heard of a on the railway from one place and is what has happened. The château s, Dame de Montal, was transported Paris, and is to be sold under the ham- for freight were sixty thousand francs, in this extraordinary manner of getting it was in so dilapidated a condition as the spot. Mr. Jules Claretie, hearing take a look at the old castle, and thus there marvels of exquisite grace. The of her husband, of her relations, have on and life. And then how seductively the guard-room, the work of Master led himself with simplicity a mason: a see in every detail of this crumbling uoy. You guess in a moment that the ver this masterly pile. In rude Gothic and everywhere 'Plus despoir!' Be- personage stands, and like St. Denis in this case, by a most fantastic caprice, mad. Madame de Montal cannot have Parisian.

SPARTA.—The celebrated cypress-tree patria, Greece, for over 2,800 years, and years before the coming of Christ, has being kypsis, who camped beneath it, as 75 feet high and 10 feet in diameter Sparta greatly mourn its loss.

BUILDING INTELLIGENCE.

[Reported for The American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

- 240,803. ELEVATOR.—Cyrus W. Baldwin, Chicago, Ill.
240,811. DOOR-SPRING.—Zionas Cobb, Chicago, Ill.
240,812. WATER-PURIFYING APPARATUS.—Sidney E. Collins, Marion, S. C.
240,813. DOOR-SPRING.—Levi M. Devore, Freeport, Ill.
240,828. DOOR-SPRING.—Samuel Jarvis, Westerville, Ohio
240,863. DOOR-SPRING.—Daniel C. Stover, Freeport, Ill.
240,868. PAPER-DOME.—Eliza Waters, Clarence W. Waters, and George A. Waters, Troy, N. Y.
240,890. SLATE-ROOFING PAINT.—Jacob L. Fauss, North Bristol, Ohio.
240,901. LIGHTNING-ARRESTER.—John L. Flinn, Elyria, Ohio.
240,908. DEVICE FOR REMOVING SEDIMENT FROM CISTERNS.—John H. Keller, New Orleans, La.
240,922. ARTIFICIAL STONE OR BUILDING BLOCK.—Jas. H. Thorp, Baltimore, Md.
240,938. METALLIC JOINT FOR WOODEN STRUCTURES.—William B. White, Quincy, Mass.
240,932. COMPOUND WATER-COCK AND SEWER-GAS CUT-OFF.—William Cahoon, Jr., Chicago, Ill.
241,017. SHUTTER-WORKER.—Lafayette Huntton, Natick, Mass.
241,018. SELF-CLOSING FAUCET.—John D. G. Hüpfel, New York, N. Y.
241,019. CROSS-UT SAW HANDLE.—Bernard A. Husbands, St. Louis, Mo.
241,025. KNIFE-FASTENER.—W. Haskell King, Athol, Mass.
241,039. KNOB ATTACHMENT.—Edward L. Phipps, Milford, Me.
241,058. MANUFACTURE OF PERFORATED BLOCKS OF TERRA-COTTA, ETC.—Augustus Revere, Camden, N. J.
241,111. AUTOMATIC ELEVATOR-GATE.—George Woods, Cambridgeport, Mass.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—Twenty-seven building permits have been issued since the last report, the following only being of sufficient importance to be mentioned:—
Henry Spieker, three-story brick building, Riverside Ave., between Hill and Federal Sts.
Andrew Hamilton, three-story brick buildings, Cumberland St., near Woodway St.
Chas. Reising, addition and improvement to dwell., Hartford Ave., near Lyndale St.
Dwellings.—Mr. A. A. Reinhard is about to build 20 new dwell., on both sides of St. Paul St., between Mankin and Brown Sts., to be 20' x 75' each, three stories high, of brick and marble; cost, about \$6,000 each. Mr. Reinhard is at present building 14 houses on Bolton St., between Mosher and McMechen Sts.
PAVING.—The company to whom the contract for repaving Calvert street, by Sts. with the Belgian pavement (Camp's process), at \$93,000, will begin work at an early day.
SCHOOL-HOUSE.—A lot, s w cor. Chase and Ann Sts., 82' x 227', has been leased by the city for the purpose of erecting thereon a building for the use of German-English school No. 4, \$15,000 being appropriated for the building.
ENGINE-LOT ST.—The city has approved the ordinance for the erection of an engine-house for No. 4 Engine Company. Work will be commenced at an early day.
BANK-BUILDING.—The National Exchange Bank has purchased the property on the north-west side of German St., running through from Liberty to Sharp Sts., with a front of 46' on Sharp St., 53' on Liberty St., and 90' on German St., on which they propose to build a bank-building.

Boston.

BUILDING PERMITS.—Druck, No. 521 Dudley St., for Mrs. Chas. Kolbe, store, 21' x 65'; M. M. Brown, builder.
Newbury St., near West Chester Park, for Geo. P. King, stable and dwell., 30' x 26', three stories; Webster & Dixon, builders.
Stable and dwell., for Francis L. Higginson, 32' x 85'; also stable and dwell., 32' x 85'.
Stable and dwell., for Charles Fairchild, 32' x 85'.
Several places, from 16 Milk St., for Kidder, Peabody & Co., banking-house, 41' x 75' and 54' x 64'; Thos. J. Whidden, builder.
Chambers St., near Cambridge St., for Estate of Daniel Henshman, store, 30' x 31'; Joshua Swanburg, builder.
Wood, No. 20 to 30 Fabon St., for David H. McKay, 6 dwell., averaging 20' x 26', two stories; David H. McKay, builder.
No. 26-27 Washington St., for Maria L. Carrier, store 32' x 13'; John Edwards, builder.
Hoyden St., near Tremont St., for John Fay, dwell., 22' x 36', two stories; Allen McDonald, builder.
Rear of 1104 Tremont St., for J. E. Piper & Co., coal-shed, 92' x 156'; Alex. McLean, builder.

Allston St., near Brighton Ave., for John W. Hollis, dwell., 34' x 22', two stories; Jacob W. Berry, builder, also 4 dwell., 20' x 30'.
Medford St., near Lexington St., coal-shed, 100' x 250'; Malcolm McLean, builder.
Blue Hill Ave., opposite Columbia St., for Wm. H. Thayer, dwell. and store, 40' x 50', two stories.
Orchard St., near Boston St., for Wm. B. Trask, dwell., 21' x 28', two stories; Wm. Eadie, builder.
Marker St., near Dorchester Ave., for Lucius H. Foster, dwell., 32' x 40', two stories; W. H. Bowker, builder.
No. 101 Longwood Ave., for Michael Kelly, dwell., 24' x 33', three stories; R. D. Ward, builder.

Brooklyn.

BUILDING PERMITS.—One Hundred and Twenty-second St., s s, 155' e Second Ave., four-story brick tenement; cost, \$12,000; owner, Ellen Hyde, one Hundred and Twenty-first St. and Third Ave., architect, John Rogers, builder, J. Hyde.
One Hundred and Twenty-seventh St., n s, 225' w Seventh Ave., 10 three-story brownstone dwell.; cost, each \$9,000; owner, A. A. Teetz, 208 West Twelfth St.; architect, W. W. Gardner; builder, P. Teetz.
Stanton St., s s, 41' w Pitt St., three-story brick convent; cost, \$25,000; owners, Capuchin Fathers, Pitt St., s s cor. Stanton St.; architect, W. Schickel; builders, S. Nieuwenhouse and C. Lehmann.
One Hundred and Eighteenth St., n s, about 200' w Harlem River, two-story brick stable; cost, \$5,000; owner, T. F. Treacy, One Hundred and Thirty-third St., near Sixth Ave.; architect, Chas. Baxter.
Forty-first St., s s, 125' w Seventh Ave., three-story brick stable and tennis court; cost, \$35,000; owner, Francis H. Weeks, 120 Broadway; architect, E. F. Little.
Fourth Ave., s w cor. Sixty-ninth St., 5 four-story brownstone dwell.; cost, each \$25,000; owner, Wm. H. Haskinson, 213 West Thirty-first St.; architects, Lamb & Wheeler.
Fifth St., s s, 50' w Second Ave., four-story brick tenement; cost, \$9,000; owner, Geo. Reichart, 314 East Twentieth St.; architect, W. Graul.
Ninety-third St., n s, 90' e Third Ave., 3 four-story brick flats; cost, each \$8,000; owner, C. M. Trimble, 118 Suydam St., Brooklyn; architect, F. T. Camp.
Penn St., No. 57, four three-story brownstone dwell.; cost, \$90,000; owner, John Sloane, 655 Broadway; architect, R. H. Robertson; builders, P. T. O'Brien and Son and Hoe & Co.
Seventh Ave., s e cor. One Hundred and Twenty-seventh St., five-story brick apartment-house; cost, \$28,000; owner and builder, Isaac E. Wright, 153 East One Hundred and Twenty-eighth St.; architect, Thom & Wilson.
West St., No. 166, s e cor. Murray St., five-story brick hotel; cost, \$23,000; owner, Wm. R. Kenwick, 226 Greenwich St.; architect, G. M. Huss; builder, H. M. Reynolds.
Fifth St., Nos. 434 to 442 w, one-story brick church; cost, \$11,000; owner, Church of Sacred Heart, 457 West Fifty-first St.; architect, W. E. Townley, Jr.; builders, W. McBurnie and S. McMillan.
Grand St., Nos. 109, 111 and 113, six-story brick and stone store; cost, \$130,000; owner, Wm. Antor, 23 West Twenty-sixth St.; architect, Thomas Stent; builder, M. Edlitz.
Twenty-first St., No. 345 w, five-story brick dwell., 25' x 84' 6", in roof, iron cornice; cost, \$14,000; owner, G. H. Hardy, 304 West Thirty-second St.; architect, J. I. Howard.
Fifth St., s s, 54' w Third Ave., four-story brick tenement; cost, \$7,000; owner, W. H. Redman, 130 West Twenty-third St.; architect, A. B. Ogden.
Leonard St., Nos. 14, 16 and 18, 3 seven-story brick stores; cost, each \$20,000; owner, Helen Juillard, 62 and 64 Worth St.; architect, J. M. Slade; builders, J. Smith and J. Downey.
Franklin St., Nos. 86 and 88, six-story iron store; cost, \$50,000; owners, I. W. How and W. P. Draper, Nahant, Mass.; architect, J. M. Slade; builders, J. R. Masterson and J. Sullivan.
Hudson St., s e cor. Leonard St., seven-story brick store; cost, \$85,000; owners, R. & O. Golet, 251 Broadway; architect, E. H. Kendall; builders, R. L. Davis and C. F. True.
University Place, s e cor. Eleventh St., six and seven-story family hotel; cost, \$100,000; owner, A. S. Rosenbaum, 165 Water St.; architect, H. Fernbach.
Thirty-first St., Nos. 149, 151, and 153 w, three-story brick store and apartment-house; cost, \$18,000; owner, L. Marcotte, 29 East Seventeenth St.; builder, John Banta.
Twenty-ninth St., No. 513 w, four-story brick tenement; cost, \$6,500; owner, Samuel Phillips, 238 West Nineteenth St.; architect, J. C. Burne.
West Houston St., No. 104, five-story brownstone store and tenement; cost, \$10,000; owner, Louis P. Drexelmeier, 153 Thompson St.; architect, Wm. E. Waring.
Eighty-second St., n s, 300' w Ninth Ave., 3 three-story brownstone dwell.; total cost, \$25,000; owner and builder, Geo. S. Miller, Tenth Ave., cor. One Hundred and Thirtieth St.; architect, R. S. Townsend.
Third Ave., n e cor. Third St., four-story brick store and tenements; cost, \$16,000; owner, Michael Ryan, 347 Bowery; architects, Babcock & McAvoy; builders, B. Sheridan and T. Overington.
Thirty-ninth St., No. 452 w, four-story brick tenement; cost, \$10,000; owner, Dennis Kelly, on premises; builder, R. Auld.
Twenty-sixth St., Nos. 316 and 320, between Eighth and Ninth Aves., 2 five-story brownstone dwell.; cost, each \$9,000; owner and builder, R. Auld, 245 West Forty-seventh St.
Thirty-fifth St., n s, 100' e Tenth Ave., 2 five-story brownstone tenement; cost, \$15,000; owners, T. C. and Cath. P. Boylan, 411 Tenth Ave.; architect, J. Sexton; builders, Van Dolsen & Arnott.
One Hundred and Twenty-third St., s s, 283' w First Ave., 4 four-story brownstone tenement; cost, each \$12,000; owner, J. C. Wandel, 335 West Thirty-first St.; architect, Fr. S. Barus.
ALTERATIONS.—Fifth Ave., No. 49, four-story brick extension, interior alterations; cost, about \$20,000; owner, F. M. Parkin, New Brighton, S. I.; architect, G. E. Harney.

(Continued on next page.)

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MAY 21, 1881.

Entered at the Post Office at Boston as second-class matter.

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In connection with the triennial fair of the Massachusetts Charitable Mechanic Association, which is to be held in Boston next September, it has been decided to organize a complete exhibition of building appliances, including materials of all kinds, — stone, brick, marble, terra-cotta and timber, limes and cements, paints and varnishes, roofing materials, glass, builders' hardware, mill-work, such as doors and blinds, mouldings and manufactured joinery, plumbing work and apparatus, with such examples of iron and glass construction as can be exhibited at a small scale; and comprising also decorations, stained glass, gas-fixtures, paper-hangings, tiles, steel and brass work, and the other ornamental details which form so important a part of modern domestic architecture. Thirty thousand square feet of floor-space has been allotted to this department, and the indications are that it will be crowded with objects of great interest to all those concerned with building. The recent exhibition of a similar kind in London, although conducted in a less liberal manner than is proposed for the Boston enterprise, was extremely successful, and there is no reason to suppose that an American one will be less so.

The credit of the plan for a special exhibition belongs in some measure to the Boston Society of Architects, various members of which have interested themselves for months in the endeavor to organize a technical museum for the use of architects and students, and gladly welcomed the opportunity which the recurrence of the Charitable Mechanic Association's fair afforded for collecting temporarily a very large and instructive special display. The Association has always included building materials and appliances in its triennial exhibitions, and a great variety of objects is usually shown, but being classified with reference to their intrinsic character, rather than their peculiar application, those whose concern is mainly with building have found it inconvenient and laborious to search for what they wanted amid a mass of objects, similar in material, perhaps, but intended for totally different uses; and for those whose time is limited there will be great advantage in having what they particularly wish to see separated for them and arranged in systematic order, while exhibitors will find it no less for their profit to have their goods so placed as to be sure of attracting the notice of the persons whom they wish to interest. In this age of rapid development in architecture, those who are attracted by any novelties or improvements in building, sanitation or decoration form a very large portion of the community, and it is reasonable to predict for this exhibition a large patronage.

Young architects, who show themselves over-ready to spend precious time and money upon competitive designs for public buildings in distant cities, where they have no friends or influence to help them, may learn a useful lesson from the testimony now being taken before the committee appointed to investigate the transactions of the architect who has had in charge the construction of the Chicago Court-House. Our readers will remember that this architect, Mr. Egan, was not long ago accused of conspiracy with a "ring" of contractors and others to defraud the county of a large sum of money, which he was

said to have accomplished by means of duplicate plans and specifications, one set of which was signed as constituting a part of the various contracts, while the other set, providing for an inferior class of work, was actually followed, the difference in value between the two being appropriated by the "ring." This accusation was made by one of the conspirators, Mr. C. F. Periolat, who professed to have turned State's evidence in order to be revenged upon Mr. Egan for neglecting to divide the spoils as agreed. According to Mr. Periolat's story, now repeated under oath, he, being at that time influential with the city and county officials, was in 1874 introduced to Mr. Egan, of the firm of Armstrong & Egan, who were preparing competitive plans for the new building, and made with these gentlemen a contract, setting forth that whereas they were in need of three thousand dollars to meet the expense of preparing plans, in consideration of that amount to be advanced by the said Periolat they would, if successful in securing the commission, pay to him one-third of all fees, percentages and emoluments to be derived from the said work; while if unsuccessful, they would pay him nothing. Most people would consider three thousand dollars so advanced as likely to prove what the brokers call a "permanent investment," and so did Mr. Periolat, especially when Mr. Otto H. Matz, by the influence of the German members of the Board of Commissioners, was awarded the first prize, and elected architect of the building; but Messrs. Armstrong & Egan representing to him that if they secured the commission their profits from "extras, charges and percentages from contractors" would be at least two hundred thousand dollars, of which he would have a third, he was stimulated by this dazzling prospect, as well as by the hope of recovering his former advances, to renewed efforts. Fortunately for him, Mr. Matz, as he says, "got drunk one night, and talked too loud," and offended the commissioners. There were still two other prize designs, but as their authors had no money or influence, this circumstance was unimportant, and, as he says, he "bought up enough commissioners to get the job transferred to Egan." The average price of a commissioner was about two thousand dollars, and when subsequently the city authorities appointed another architect to design their wing of the joint building, he was obliged to buy a number of aldermen at one thousand dollars apiece to have this half of the "job" also handed over to Mr. Egan; so that his whole outlay was something like twenty-four thousand dollars. In addition to this, he expended eight thousand dollars in procuring for Mr. Egan the commission for erecting the Criminal Court building, and had him also appointed architect of the Insane Asylum, so that his actual outlay was nearly thirty-five thousand dollars. In return for this, Mr. Egan, instead of sharing his profits with him as he agreed, had only paid him fifty-two hundred dollars, notwithstanding that he had obtained for him an order to pay him fifteen thousand dollars as an extra on account of changes in the plans, with the express understanding that a part of this amount should be applied to his claim. Feeling himself aggrieved by this treatment, he resolved, as Mr. Egan expresses it, to "squel" upon the ungrateful architect, and it is to the carrying out of this purpose that the present developments are due.

The plumbers' registration bill has passed the New York Senate and Assembly, and only awaits the Governor's signature to become a law. Whether this is all that will be needed to insure good plumbing for the future in New York houses is more doubtful than the *Evening Post* appears to think, but it will probably be of some use. The portion which appears to us most likely to be serviceable is that providing for the examination of plans and specifications for drainage works by the Board of Health before operations are commenced, and by official inspectors after it is done, and before it is covered up. Notwithstanding some minor differences of opinion among engineers, the main points of efficient house drainage are well settled and generally understood among those who pretend to any technical knowledge on the subject, so that there need be no question of the ability of the Board of Health to perform its duties, while the inspection of the work, and its comparison with the recorded plan, need not be difficult, if the regulation in regard to leaving it exposed is complied with. This regulation will of itself exert a salutary influence over plumbers, since builders and owners, unwilling to submit to the annoyance of keeping their constructions at a stand until the inspector's arrival, will

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Attorney and Counsel, GEORGE HAYES,
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New York, N. Y., January 1, 1880.

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T. Lenman, three-sty brick store, 25' x 90',
Clark Ave., between Fourteenth and Fifteenth
Sts., cost, \$7,000.
J. Soumerville, three-sty brick dwell., 30' x
thirteenth St., between G and H Sts., n w;
+ 1000.
St. Church Chapel, 30' x 60', M St., between
and One-half Sts., s e; cost, \$4,000.
Hazen, three-sty brick dwell., 44' x 46', K
sixteenth Sts., n w; cost, \$24,000.
General Notes.
VILLE, CLARK COUNTY, VA. — For Mr. Mo-
cock, a \$6,000 house is to be built from designs
of Geo. E. W. Harding, of New York.
Same architect has also designed plans for a
garage for Mr. A. K. Ogden.
SAUGUA, N. Y. — Mr. N. Aldrich is to build a
house east of his hotel, 30' x 72'.
VILLE, O. — E. E. Book is to build a new store.
TOWNS, N. J. — The corner-stone of the Church
at Monaca was laid May 4.
MASS. — Dover and Foxcroft propose to build
union town-hall, at a cost of \$12,000.
HAMPTON, CONN. — Alterations are about to be
made in the Congregationalist Church; T. W. Sil-
lito of Boston, architect.
PROVIDENCE, R. I. — P. A. Monroe, N. F. Burr,
W. H. Barney are a committee to raise funds
towards building a Universalist Church.
TOWNS, MD. — The corner-stone of the new
St. Church, cor. of Main and Upal Sts., was
laid May 2. The church will cost \$30,000.
VA. COL. — Hon. B. H. Eaton is building a large
villa, from designs prepared by R. S. Roess-
architect, Denver; cost, \$25,000.
TOWNS, CONN. — President Huntington of the
Central Pacific Railroad will rebuild the Congrega-
tional Church.
MASS. — The contract price to build Baird &
son's Block is \$15,000.
VILLE, KY. — The following building permits
have been issued since last report:—
John Stafford, frame cooper-shop; cost, \$2,520.
Peter Belknap, brick dwell.; cost, \$9,000.
W. W. Swearingen, brick warehouse; cost, \$28,000.
J. J. Clark, architect.
W. W. Swearingen, frame stable; cost, \$7,000.
C. McCarthy & Wood, tannery; cost, \$11,500.
The Newcomb-Buchanan Co., brick warehouse;
cost, \$20,000.
TOWN, MASS. — Improvements in the Baptist
church are anticipated; Mr. T. W. Silway, of Bos-
ton, architect.
VILLE, TENN. — There is a movement to build
their dormitory for Fisk University, in addition
Livingston Hall, now building.
HAYES, CONN. — At Yale College a new library
the Divinity School is to be built, at a cost of
\$10,000, from designs of Mr. Ed. E. Raitt, of
New York.
TOWN, MASS. — Plans are now being drawn for a
new wooden house for Mr. Samuel L. Powers, on
Livingston St., cost, \$20,000; Messrs. G. R. & R. G.
W. of Boston, architects.
A frame house on Centre St., is being built for
L. Ripe, by S. J. F. Thayer, architect, Boston;
it, about

ARCHITECTURE AT

CHICAGO, from the Ultima Thule of the West, has become almost the centre of population on the continent, and the need of better facilities for transferring from one side of the city to the other the freight and passengers to whom it is but a way-station on their journey has become pressing, as every traveller knows. Two or three plans for "belt railroads," to encircle the city, intersecting all the other lines, have been under consideration, and one is likely to be carried out without delay, which will extend from the docks and rolling-mills at South Chicago to the tracks of the Chicago Southern road, now owned by the Grand Trunk Railway; and thence to the Burlington and Quincy and North-western systems. It is very possible that more direct communication may be obtained in the future, but for the present this new line will prove very serviceable. Nothing is more desirable, so far as the interests of the public are concerned, than that this gradual interweaving of the great trunk lines should proceed without interruption, as a means of breaking down the monopoly which is always exercised by a single road. In England, where the system of branch and junction roads is carried to such a pitch that it is possible to travel between almost any two points by a dozen different routes, railway rates are, if not low, at least nearly uniform, and the alterations of extortionately high rates with absurdly low ones, so common here, are unknown.

THE switchmen on the Chicago, Milwaukee & St. Paul Railroad struck about three weeks ago for an advance in wages, accompanying their demonstration by some acts of violence. After waiting awhile without being able to obtain the desired advance, they proceeded to call attention to their wants in a still more emphatic manner. One of the foremen at the company's yard at Milwaukee, who had refused to listen to the overtures of the strikers, was riding late at night on a shifting-engine with the engineer and fireman, when a bomb was thrown at the engine, fortunately falling short and striking in a ditch at the side of the track, where it exploded with a detonation like the discharge of a cannon, tearing up the ground for yards around, and shattering the glass in the neighboring houses to a considerable distance. The engine was slightly injured, but no harm was done to the three men upon it. On examining the ground, another bomb was found which had fallen in the mud of the ditch, and had failed to explode. It was about six inches long, filled with nitro-glycerine, and wrapped with canvas. Search was made for the persons who threw the bombs, but without result. The introduction of these new arguments into the counsels of railway strikers opens a prospect not altogether agreeable. If switchmen see fit to attempt the indiscriminate assassination of three persons to gratify a private grudge against one of them, there is no reason why the principle should not receive still further application, and the blowing up of passenger trains become a recognized means for raising the standard of wages among railroad employees, or securing other objects which they might deem desirable. It is scarcely necessary to point out the certain ruin which two or three repetitions of such outrages as have occurred on the Milwaukee & St. Paul and the Grand Trunk lines would bring to the business of any railroad, and the interest of the former line, as well as public protection, demands that these would-be assassins should be speedily found and brought to justice.

CONSIDERABLE interest is felt in England with regard to the election of a President for the Royal Institute of British Architects, to succeed Mr. Whichcord, the present incumbent. The By-laws provide that the Council shall nominate an official candidate, and, probably to prevent dissensions in the government of the Institute, another recent regulation requires that in case of a vacancy in the Presidency, the senior Vice-President shall be thus nominated. In the present case, the senior Vice-President is Mr. Horace Jones, for a long time architect to the city of London, and a man personally popular, but by no means distinguished in the profession. The presentation of his name by the Council was a great surprise to the public, and to those members of the Institute who were ignorant of the regulation which left the government no other choice, and a movement was immediately commenced for bringing forward as an independent candidate Mr. George Edmund Street, now the most prominent architect in Great Britain. It is unquestionably for the interest of the Institute that it should be presided over by its most distinguished members, and Mr. Street,

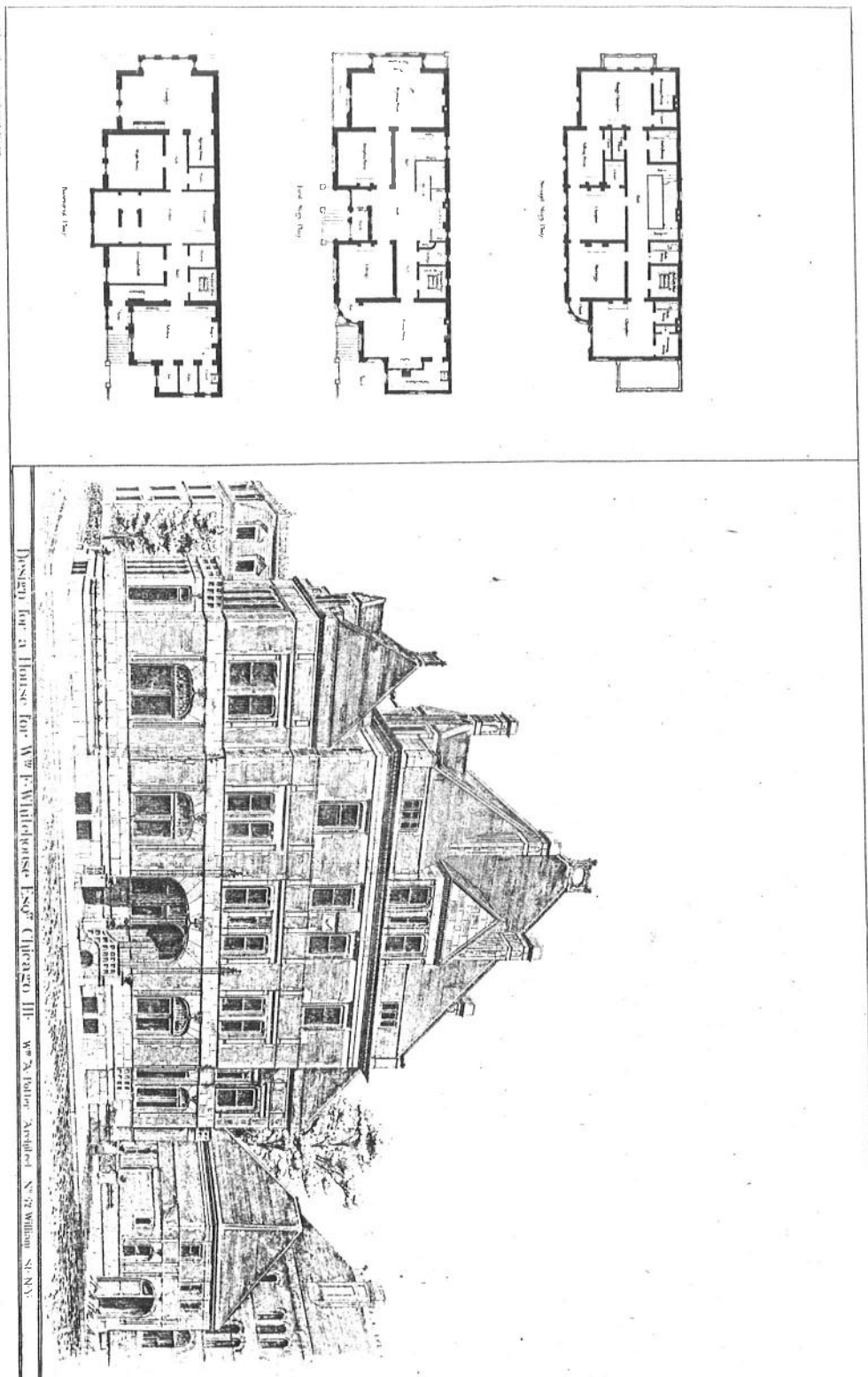
if he is willing to be a candidate, as is understood to be the case, will receive a very large vote. There are, however, many members who feel it a duty to support the official nominee, either from a sentiment of loyalty to the Council, or through fear of disturbing the harmony of the Institute, and Mr. Jones, unless he should see fit to withdraw his name, which would perhaps be the most graceful way out of the difficulty, will probably have a strong support. The question is still further complicated by the fact that Mr. Street held for some time the position now occupied by Mr. Jones, but resigned it in consequence of the dislike which he felt for the principle of official succession, so that the canvass will be to some extent not only a contest between persons and reputations, but between two systems of government for the Institute.

THE representation of the *Œdipus Tyrannus* of Sophocles in the original Greek, which has been looked forward to with much interest for a long time, took place in the Academic Theatre at Cambridge last week before a very large and appreciative audience. So great was the demand for tickets that no less than three repetitions of the play were necessary to satisfy it, and the success of the undertaking certainly justified the care and time which have been devoted to it. The preparation of the single scene was entrusted to Messrs. Ware & Van Brunt, the architects of the theatre, who in turn delegated it to Mr. Eugene Létang, Assistant Professor of Architecture at the Institute of Technology, who prepared the carefully colored drawings and full-size details from which the work was very successfully executed by Mr. Albert Haberstroh. The whole flat was about sixty feet long, and nearly thirty feet high, and was painted in imitation of the conventional architectural composition which in the Greek theatres stood for whatever building the play might require. In the present case it depicted, with all the fidelity that attentive study of the best authorities could give, a royal palace of the earliest historical period in Greece. The lower half was occupied by a plain wall of masonry, with a large door in the centre and smaller ones on either side, surmounted by a frieze about thirty inches high on which was painted the battle of Greeks and Amazons, copied from the frieze of the temple at Bassæ in Arcadia, now in the British Museum, or rather, to speak with greater accuracy, from its miniature reproduction and restoration belonging to the architectural collections of the Institute of Technology, which was photographed and the enlarged image thrown upon the strip of canvas which was to become the frieze, thus simplifying the artist's work. This basement supported an order of engaged columns carrying a cornice and two small pediments, one over each of the side doors. This order was taken from the small temple at Selinus, called by M. Hittorff the Temple of Empedocles, one of the best known examples of the combination of a Doric entablature with Ionic columns. A purer Ionic style would have seemed bare without another frieze of figures, while a pure Doric order, unless drawn in perspective, would have looked like a series of pilasters. Besides, the refinement of the Doric style would have been impracticable with the means at command, and without them the order would have seemed bare and rude. The architects availed themselves of the opportunity to try an experiment in polychromy on a large scale, closely following M. Hittorff's monograph, with blue triglyphs, red metopes, etc., and the effect though sufficiently novel was unexpectedly rich and sober, materially contributing to the splendor of the occasion. Many of the decorative accessories to the stage were copied directly from examples remaining in the Theatre of Dionysos, at Athens, and the splendid costumes of the performers were designed by Mr. F. D. Millet with the same care that marked all the efforts for obtaining local color. The performance was in every way excellent. Even the strangeness of the language in which the tragedy was given interfered very little with the enjoyment of the spectators, and the earnestness of the actors prevented it from detracting in the least from the serious, almost solemn interest of the story. The details of the affair were carried out with an attention perhaps almost too minute. The programme necessarily contained directions to the audience upon topics not strictly classical, and it recalled a little the burlesque documents which amuse undergraduates to see the announcement at the foot that "hamacsai hipposiderodromikai" would be in waiting to convey passengers to the city. *Œdipus* himself would hardly have suspected that this expression stood for simple horse-cars.

The display of architecture specially noticeable for the particularly those of members has so few representatives in the House. Of the three sends anything; of the Ass the exhibition, as alas, he has been sent from the office of us — if such were needed — very silence speaking all the profession has sustained in we are deprived of Mr. Shaw has been abroad most of the mate can do for a shattered work return well and strong soon before him yet. The Mr. Shaw would make a architects. It is a relief to at Mr. Street's works now in design, and so admirably 1,109). View across the N shows his wonderful draughts sign are brought out in the almost without a fault; the English Gothic, fit to stand ite thirteenth-century period erected in the South Trans the Hon. and Very Rev. A. old tomb in an old cathedral character of the work, — an type. The colored drawing Kingston, Dorset (No. 1,101) is apparently not from his moulded nave arcade support chance reminding one very Street's other work is a V Babuino, Rome (No. 1,037) as Mr. Street's Church of St the drawing not being from is very good, and quite catch the gable of the transept see the upper part of the octagon usual power of design. The probably the whole design w does here on paper. Mr. V principal one (No. 1,084). C of Technical Education, Sou its decided leaning towards from such a consistent Goth to bow the knee to Baal? W ing design much more artis It is a large building with a bles of the latter are most coats of arms, and foran mos central gable, which is surm so spirited, while the princ manner; for the rest the bu dows divided into small squa mark of the beast set right treated and shown in a most thor's very best manner. T a large and important apar here we have his own pecu ture and fittings just as we Mr. Waterhouse, but there nificent, very correct to the cust plenty of money, but son He is much more to the pe 1,010), The Clock Tower to to the Memory of the late M like tower, a capital landma waters of the Mersey. The stone artistically introduced and is finished with a short the features of the great sea the Atlantic liners will make a rentable feature too. It is s Taking the numbers now i headed by 1,008, Temple B Mr. Horace Jones, which is rial from the South-East, bo mous Memorial, the only dif grounds, which in the one ca new Law Courts. The Mem in both, we are reminded of ment from the "N.W." and as much purpose in the ill itself into the usual half-tim present fashionable style. 1

May 28, 1881

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tions turned into a ship and taken in tow in the latter part of 1877 by a steamer. In the Bay of Biscay the two parted company in a storm, and this delay and a lawsuit for salvage cost Mr. Dixon £5,000 London, 1878, January 21, and was set up on the Thames Embankment September 13, 1878. Its height is about sixty-eight feet. The fellow in New York, the sea-air of Alexandria had injured some of its sides and inscriptions. The weight is nearly two hundred tons.

Our New York obelisk,² as already stated, was one of a pair with the London obelisk, and was erected at Heliopolis (which is not far from the apex of the Delta), before the Temple of Tum, the Sun, by Thothmes III (eighteenth dynasty, about 1600 or 1500 B.C.). The pair was removed to Alexandria in the reign of Augustus, 22 B.C. From the time they became known to European travellers of modern times one had remained standing on the beach of Alexandria, the other was fallen, and they were known by the traditional name of "Cleopatra's Needles." An inscription, however, discovered in 1877, shows that they were erected in Alexandria eight years after the death of that Egyptian siren. Their Alexandrian engineer had supported the rounded corners of our obelisk on metal rods, which for ornament's sake were made to pass through the bodies of bronze crabs sixteen inches long, twelve wide, eight thick. The two rods, by Mr. Dixon, the engineer of the London obelisk, in 1877. The two crabs had one claw left between them, and on the inner and outer sides of this claw were Latin and Greek inscriptions, which fixed the date of their erection at Alexandria and the name of the engineer.

When Lieutenant-Commander Goringe laid bare the foundation of the obelisk he found that the pedestal stood on a substructure of three low, square stages making three steps. These steps rose from a tessellated marble pavement of white and blue tiles. Underneath not laid in mortar, in shape a cubical block of rough, irregular stones ten feet. The structure above ground was about eighty feet high. The heights of its members, roughly given, are: obelisk sixty-nine feet, pedestal seven feet, each of the steps one and one-half feet. The pedestal projected beyond the base of the obelisk about half a foot, and each step was about one and one-half feet wide. The lower step was about eighteen feet square. The exact dimensions of the shaft, converted into feet by Dr. Weiss from the metres of Zola,³ are: height, sixty-eight feet eleven inches. One pair of opposite faces is eight feet three inches at bottom, five feet three inches and five feet four inches at top; the other pair is seven feet eight inches at bottom, five feet, and four feet ten inches at top. The pedestal was strangely irregular; it was six feet ten inches high, and no two faces were equal; it was eight feet seven inches to nine feet two inches. While the shaft and pedestal were of Syene granite, the three steps were a limestone, hard and whitish-yellow. The lower step was a square layer of eighteen stones. The upper two steps were not two composed of six blocks surrounding a square space in the middle, which space, extending through the two upper steps, was plugged stones. One of the three blocks in the middle square compartment was not limestone but Syene granite, and it filled the east angle of the compartment (the angles of the obelisk and its foundations faced Syene granite and a third was an unusually white limestone. One granite block had hewn out on its upper face a mason's (or carpenter's) square. The granite block in the compartment of the two upper steps, and the two in the lower step, with the white stone, are considered by Lieutenant-Commander Goringe to be Masonic emblems, as also certain stones with curious markings in the underground foundation. On a stone near the mason's square in the lower step was an iron trowel imbedded in cement. The trowel, the square, and certain mathematical figures on stones in the underground foundation were evidently deposited as the marks of the builder's calling. Whether Freemasonry of the present day descends in a direct line from antiquity, and whether the builders of the obelisk's foundation were members of the supposed brotherhood, is another question.

In 1877 Mr. W. H. Hurlbert, the editor of the *New York World*, who had made the acquaintance of the Khedive of Egypt, was in New York the fellow of the London obelisk. It was through the eloquence of Mr. Hurlbert that a New Yorker gave £15,000, the sum named as adequate by Mr. Dixon, who was then engaged as the contracting engineer. Meanwhile the Secretary of State, Mr. Evarts, had been petitioned to convey to the Khedive a request for the gift

¹ A discussion which is at present being carried on in the New York daily papers tends to throw doubt on the translation of the hieroglyphic inscription have yet discovered the real key to the hieroglyphic records of the ancient Egyptians.

² The two colossal bronze sphinxes which are to be placed at the foot of the obelisk on the Thames Embankment will be finished by August next. One of them is nearly completed already, and is, perhaps, the largest bronze casting in one piece ever made, weighing as it does about seven tons, and standing nine feet high. The lions at the base of the Nelson column in Trafalgar Square were cast in twenty-seven parts and riveted together, and are smaller than these sphinxes.

of Cleopatra's Needle. The request was negotiated by the American consul-general, Mr. Farnham. Political troubles in Egypt and other causes delayed the ratification, but finally, in May, 1879, the original offer was converted into a gift by the new Khedive, Mohammed Tewfik. Mr. Dixon now declined to take the risk for £15,000, for the accident in the Bay of Biscay had cost him dear. Here the man of the occasion presented himself. Mr. H. H. Goringe, an American citizen and naval officer of West Indian birth, returned from a cruise in the Mediterranean, where he had studied the question and made up his mind as to the methods of removal. The result was that Mr. Evarts informed Mr. Hurlbert that Lieutenant-Commander Goringe was the man for the work.

The obelisk was first encased in oak planking to protect the surface. The process of laying it on the ground consisted of two parts, — first to revolve it vertically on its centre of gravity into a horizontal position, then to lower it, always maintaining the horizontal position. To revolve the mighty shaft two huge trunnions were clamped on two sides at the centre of gravity, and the trunnions supported on two great iron scaffolds. Finally the shaft was guyed at top from four points to keep it steady throughout the operation. Before beginning the revolution the obelisk was slightly raised vertically to enable its base to clear the pedestal, and this was done by "right and left thread turn-buckles" connected with rods inserted into the bottom of the trunnions. This machinery was made in New Jersey after Lieutenant-Commander Goringe's own designs, and was landed at Alexandria about November 1, 1879. On December 6 the obelisk was raised so as to clear the pedestal; then, pedestal and steps removed, it was revolved on its trunnions, till it hung horizontally, high in air. In order to lower it to the ground a pile of beams laid crosswise was built up under each end as the new machinery to take the place of that which had done the revolving. The obelisk was slowly lowered by taking from the top of each pile in turn. The next step was to roll it on to the pontoon which was to take it to the steamer, and then into the steamer's hold. Resting in a cradle, it was laid down for sixty feet in front of the obelisk. The track was effected by an engine winding a rope round a drum, the engine attached to the front of the cradle, and thus pulling itself and its burden up to a point at which the other end of the rope was fastened. The obelisk was rolled from the pontoon through a hole in the side of the steamer, made by detaching some of its iron plates. This steamer, the *Dessoug*, was bought expressly to take the obelisk across the Atlantic. The obelisk set out from its native shores on June 12, 1880, and arrived in New York on July 20. The *Dessoug* was put into dry-dock on Staten Island, at Clifton, and on September 6 the obelisk was rolled out exactly as it had been rolled in. After much waiting for good tides the pontoon, on September 16, was towed to Ninety-sixth Street and North River, New York. Its route to its resting-place in Central Park was through Ninety-sixth Street, down the Boulevard, through Eighty-sixth Street and its transverse road across the Park, down Fifth Avenue, then, turning west at Eighty-second Street, to the site on a knoll near the south-east corner of the lower reservoir, near the Metropolitan Museum of Art. After leaving the shore at Ninety-sixth Street the cannon-balls were replaced by frames containing rollers. From the gate at Eighty-second Street and Fifth Avenue a huge bridge of trestlework was built across the hillocks and hollows of the Park to bring the obelisk by a revolving back upon its pedestal. For this the same machinery used in Alexandria to revolve it off of its pedestal had been shipped back to New York. . . . On January 22, 1881, "Cleopatra's Needle" was replaced on its ancient pedestal on the Greywacke knoll in the Central Park of New York.

THE ILLUSTRATIONS.

HOUSE FOR W. F. WHITEHOUSE, ESQ., CHICAGO, ILL. MR. W. A. POTTER, ARCHITECT, NEW YORK, N. Y.

"CLEOPATRA'S NEEDLE" IN CENTRAL PARK, NEW YORK, N. Y.

(Gelatine Print.)

FOR description see preceding article.

SKETCHES OF SOME EXISTING OBELISKS, MADE BY MESSRS. D. A. GREGG AND G. R. TOLMAN.

The date of erection attached to these sketches refers to the erection of the obelisks by the popes.

LEGAL NOTES AND CASES.

Mechanics' Lien. — Insurance from Loss by Fire. — Property mortgaged beyond the Value of Buildings and Land. — Failure to proceed upon Lien.

The Supreme Court of the United States, in April, in the case of *The Royal Insurance Company, of Liverpool, vs. Stinson*, considered the question whether or not a builder had an insurable interest to the extent of his mechanics' lien on the house he was constructing, when the mortgage upon the land was so large that it covered the value of the building and the land. There was in the case, also, the question: Should a builder who has insured the amount of his mechanics' lien be compelled to continue the proceedings taken by him to enforce his lien, after the building has been destroyed by fire, to entitle him to recover the insurance?

Stinson had a contract to build a house, at Marshfield, nearly done, but the son stopped work and cover the amount due interest as contractor destroyed, and Stinson brought suit upon the contract. The court refused to pay him on the contract, but allowed the suit for enforcement of his lien, prior to his lien, was allowed. The court held upon both points, and the insurance company affirmed.

Judge Bradley, in the case, after the plaintiff, after the defendants themselves, aside from this consideration at the time of issuing the amount insured, to the amount insured, the defendant prosecuted the further rights and costs and expenses, a recovery would have been a defense. No such course was taken.

As to the other question, plaintiff, there is no doubt, the existence of a standing lien to absorb it. Laid in May on Insurance, Marshall in delivery, *Insurance Co. vs. Lawrence*. The insured in that case for a purchase of the property complied with, but at the time of effecting the Chief Justice said, "The interest held under an existing, the person claiming interest in the property. The law is his. If the purchaser owes the purchase-money still valuable to him. That his debts may absorb never been considered as destruction of the property who claims title under that his title may be defeated this loss." The principle reason of the thing, leads equity of redemption has the insurable property, liable for the mortgage debt, ownership, carrying with property from the incumbrance for such incumbrances, it exacting.

"Such being the insurable redemption, it follows that property by virtue of a considerable interest, limited amount of his claim. In the value of the building insured claim; and that the latter insurable interest of the lien, which is a *ius ad rem*, are potentially his. They are security, and he can reduce paid. He is, therefore, directed of his demand, what entitled to insure to that extent full amount of his insurance to satisfy his debt."

Nuisance. — Area, or Open

An owner of premises abutting right, in the absence of to make and maintain an area but he is liable to all persons exercising ordinary caution. *Torts*, 660, it is said: "If one of the highway that one lawfully accidentally fall into it, his against such accidents is in

May 28, 1881

Publishers' Department.

The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY

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DRAFTSMEN WANTED. Page 264.

BUILDING INTELLIGENCE.

Fortieth and Forty-first Sts., on wharf, 2 two-story brick oil factories; cost, \$10,000; owners and masons, Bush & Denlow, foot Twenty-fifth St., on dock; architect, G. Daman; carpenter, Otto Christiansen.
McDonough St., n. s. 250' w Tompkins Ave., two and one-half story brick dwell.; cost, \$10,000; owners, McKim, Mead & White.
Smith St., n. s. 75' Butler St., four-story brick store and dwell.; cost, \$10,000; owner, J. F. Peppard, 126 Hoyt St.; architects, J. Freeman and Hudson & Dolz.
Gramham Ave., s. e. cor. Broome St., 4 two-story frame dwell.; cost, total \$3,900; owner, K. Kohnman, 38 Van Cort Ave.; architect, F. Weber; builder, J. Schuch.
Norman Ave., n. s. 100' e Manhattan Ave., three-story brick tenement; cost, \$5,100; owners, E. Naehr and B. Zurn; architect, F. Weber; builder, G. J. Roberts.
Hooper St., Nos. 195, 197, 199, and 201, 4 three-story brownstone dwell.; cost, \$7,800; owner, Mary J. Ferguson, 330 South Fifth St.; builder, R. Ferguson.
ALTERATIONS.—De Kalb Ave., n. e. cor. Adelphi St., four-story brick extension; cost, \$5,000; owner, C. W. Von Glinn, 201 Adelphi St.; architect, C. F. Eisenach; builders, J. Ruyne and L. W. Seaman, Jr.
Floyd St., n. s. 311' w Lewis Ave., 2 two-story frame dwell.; cost, \$3,500; owner, Anthony Straub, Floyd St., near Yates Ave.; mason, Mr. Kuhn; carpenter, John Rueger.

Chicago.

BUILDING PERMITS.—Church of Ascension, one-story brick school house, 17' x 99', La Salle and Elm Sts.
H. McGuire, two-story brick dwell., 39' x 66', Ashland Ave., near Nineteenth St.; cost, \$7,500.
S. J. Cohen, same, 25' x 62', 48 Lincoln St.; cost, \$7,500.
A. S. Maltman, 6 two-story brick dwell., 21' x 44', 152-72 Jay St.; cost, \$10,000.
J. S. Maltman, two-story brick dwell., 21' x 44', 177-99 Seminary Ave.; cost, \$3,500.
J. M. Hawling, two-story brick store and dwell., 20' x 74', 137 Canal St.; cost, \$6,000.
C. O. Gleason, 4 two-story brick dwell., 50' x 64', 2310-11 Rhodes Ave.; cost, \$6,100.
H. H. Gage, same, Tremont and Sophia Sts.; cost, \$12,000.
G. L. Dunlap, elevator, 103' x 380', Thirty-third St. and river; cost, \$1,000.
P. Canlin, three-story brick dwell., 21' x 60', Western Ave.; cost, \$4,000.
E. R. Lott, three-story brick store and dwell., 50' x 64', 763-5 Halsted St.; cost, \$16,000.
S. E. Egan, two-story brick dwell., 30' x 65', Dearborn and North Ave.; cost, \$17,000.
Mrs. E. G. Kianer, 2 three-story brick dwell., 40' x 40', Hubbard and Halsted Sts.; cost, \$6,000.
R. H. Heratsky, 3 three-story brick store and dwell., 90' x 111', Blue Island and Centre Aves.; cost, \$12,000.
O. R. Keith, two-story brick dwell., 52' x 82', Prairie Ave.; cost, \$60,000.
D. Pyott, 2 three-story brick dwell., 38' x 40', 628-28 West Jackson St.; cost, \$12,000.
R. D. Sheppard, five-story brick stores, 40' x 175', 77-78 Monroe St.; cost, \$40,000.

DISSOLUTION OF PARTNERSHIP.

NEW YORK, May 17, 1881.

We have to announce to our readers that the firm of Bicknell & Comstock is dissolved by mutual consent.

The business, however, will be carried on the same as heretofore, by Mr. William T. Comstock, who has been known as a member of the firm for the past four years, and who is thoroughly conversant with the business.

We understand that Mr. Bicknell will for a time retire from active business, as the close confinement to it for the past sixteen years makes it seem judicious for him to take a season of rest.

For the present his office address will be the same as heretofore.

ASPHALTE.

THE Neuchatel Asphaltic Company, office 54 Astor House, has lately laid a large area of floors with its Asphalt in the Sugar Refinery of Messrs. Havemeyer & Elders, Williamsburgh, floors in the Harmony Mills, Cohoes, in the mills of the Merrimack Manufacturing Corporation, Lowell, Mass.; Messrs. Bolton's Brewery, Lansingburgh, N. Y.; the stables and floors of the Albany Brewing Company, Albany; stables for Mr. Lindsey, architect, Newark, N. J.; for the American Horse Exchange, Broadway and Fifth Street; for Mr. Adrian Iselin, New Rochelle, and is now laying walks in St. Paul's Churchyard and at St. Augustine's, Houston Street, for Trinity Church Corporation. The company has appointed the American Asphalt Pavement Company of New England, 31 Milk Street, Boston, its agents for Massachusetts, and has contracts in Boston to lay floors in the Standard Sugar Refinery, for Messrs. Snell & Gregerson, architects, and other parties.

ARTISTIC WALL PAPERS.
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BUILDING INTELLIGENCE.

Mortimer & Tapper, 3 two-story brick dwell., 42' x 50', Jackson St., near Ashland Ave.; cost, \$16,900.
Mrs. Quinlin, two-story brick dwell., 21' x 50', Haynes Ave. and Lyman St.; cost, \$3,500.
A. Schuerli, two-story brick dwell., 22' x 56', 2612 South Park Ave.; cost, \$5,000.
J. L. Waller, 2 two-story brick dwell., 40' x 53', West Indiana St.; cost, \$11,000.
H. Klare, three-story brick dwell., 26' x 55', 229 Ontario St.; cost, \$7,000.
C. J. Hull, 1 two-story brick dwell., 17' x 40', 23-35 Arctician Ave.
SCHOOL-HOUSE.—A school-house, to cost \$40,000, is about to be built at Nos. 145 and 163 Evergreen St.
ELEVATOR.—Mr. George L. Dunlap is to build a grain-elevator, 103' x 208', on Thirty-third St.; cost, \$40,000.
HOUSES.—Messrs. Burnham & Root, architects, have completed the plans for a house for Mr. A. Byron, to be built on Michigan Ave., near Twenty-ninth St.
J. W. Ackermann, architect, is now putting up on Archer Ave., cor. Main St., a two-story brick building 21' x 63' with stone trimmings, for Thomas Power, two-story brick house, cost \$3,600; at No. 47 Granger St., a house for C. Helm, cost \$4,800.
ARMORY.—Mr. George Edbrooke, architect, is finishing designs for Battery D's new armory.

Cincinnati.

BUILDING PERMITS.—J. H. Epton, 4 three-story brick dwell., Seventh St., near Freeman St.; cost, \$8,000.
John Seymour, 2 three-story brick, Third St., between Broadway and Ludlow St.; cost, \$5,000.
B. Kohnman, three-story brick, s. e. cor. Sixth and Pearson Sts.; cost, \$6,000.
Mrs. Oliver, three-story brick, Central Ave., near Liberty St.; cost, \$6,000.
H. F. Fossett, two-story brick, 15 Stone St.; cost, \$3,500.
Evans Estate, 5 double brick dwell., Bellevue Ave., Mt. Auburn; cost, \$30,000.
John Ryan, two-story brick, No. 2 Charles St.; cost, \$6,000.
Fifteen permits for repairs; total cost, \$12,000.

New York.

BUILDING PERMITS.—One Hundred and Thirtieth St., s. s. 175' e Seventh Ave., 4 three-story brownstone dwell.; cost, each \$8,500; owner, Wm. McKeenolds, Westfield, N. J.; architect, T. S. Godwin; builders, Tyson & Van Dolan and J. B. Smith.
Fourth St., No. 230 w. cor. West Tenth St., five-story brick store and tenement; cost, \$19,500; owner, Hermann Reger, 101 Seventh St.; architect, F. W. Klempf, builders, Murphy & McInty and Grissler & Fausel.
One Hundred and Seventeenth St., n. s. 100' w First Ave., 4 four-story brownstone tenements; cost, each \$8,000; owner, L. Snyder, 163 Broadway; architect, G. J. Carey.
One Hundred and Twenty-eighth St., n. s. 150' w Seventh Ave., 3 three-story brownstone dwell.; cost, each \$9,000; owner, R. M. Streibigh, 7 East Forty-eighth St.; builder, Samuel Lynch.
One Hundred and Thirtieth St., n. s. 300' e Seventh

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BUILDING INTELLIGENCE.

Ave., 3 three-story brownstone dwell.; cost, each \$9,000; owner, R. M. Streibigh, 7 East Forty-eighth St.; builder, Samuel Lynch.
Tenth Ave., n. w. cor. One Hundred and Seventh St., four-story brick store and tenement; cost, \$13,000; owner, James Hamel, 34 West Fifty-fifth St.; architect, R. S. Townsend; builders, James Hamel & Son.
One Hundred and Twenty-sixth St., n. s. 125' w Seventh Ave., 3 three-story sandstone dwell.; cost, each \$6,000; owner, Adelaide Wilson, 74 East One Hundred and Twenty-eighth St.; architect, J. F. Miller; builder, Thos. Wilson.
Park St., Nos. 67, 69 and 61, six-story iron printing office; cost, \$40,000; owner, W. B. Smith, 314 Broadway; architect, E. L. Woodruff; builder, G. W. Moore.
Second Ave., w. s. 70' n One Hundred and Twenty-second St., four-story brick flat; cost, \$13,000; owner and builder, E. L. Pierson, 57 Third Place, Brooklyn; architect, F. C. Merry.
Twenty-eighth St., Nos. 417, 419, and 421 w. eighth-story brick factory; cost, \$40,000; owner, Charles S. Fischer, on premises; architect, Geo. B. Pelham; builder, J. C. Wessells.
One Hundred and Twenty-fifth St., Nos. 62 and 64, four-story brick tenement; cost, \$30,000; owner, Chas. Wilde, Nos. 413 and 415 East One Hundred and Twenty-fourth St.; architects, Babcock & McAvoy.
Fifteenth St., Nos. 241 and 249, 2 five-story brownstone apartment-houses; cost, each \$35,000; owner and builder, F. A. Seltz; architect, J. M. Dunn.
Forty-ninth St., No. 140 w. five-story brownstone apartment-house; cost, \$18,000; owner and builder, Frank A. Seltz, 332 East Forty-second St.; architect, J. M. Dunn.
One Hundred and Twenty-seventh St., n. s. 250' e Eighth Ave., 6 three-story brownstone dwell.; cost, each \$10,000; owner and builder, S. O. Wright, 135 East One Hundred and Thirtieth St.; architect, J. H. Valentine.
Madison Ave., s. w. cor. Sixty-ninth St., 6 four-story Nova Scotia brownstone dwell.; cost, from \$22,000 to \$35,000 each; owners and builders, Chas. Buck & Co., 63 East Forty-first St.
North Moore St., Nos. 31 and 33, seven-story brick storage; cost, \$20,000; owners, Jas. M. Dunbar and F. W. Haynes, 59 Leonard St.; architect, J. M. Slade; builders, J. H. Masterton and John Smith.
Fifty-fifth St., n. s. 150' w Sixth Ave., 3 two-story brick stables and dwell.; cost, each \$6,000; owner, E. J. Donnell, 41 West Fifty-eighth St.; builders, L. N. Crow and McGuire & Sloane.
Fifty-fifth St., n. s. 350' w Sixth Ave., 3 two-story brick stables and dwell.; cost, \$2,000; owner, E. J. Donnell, 41 West Fifty-eighth St.; builders, L. N. Crow and McGuire & Sloane.
Eighty-ninth St., s. s. 135' e Fourth Ave., 2 four-story brownstone tenements; cost, \$12,000; owner, architect and builder, J. B. Squier, 21 East Seventy-ninth St.
One Hundred and Seventeenth St., n. s. 200' w Second Ave., 4 four-story brick tenements; cost, each \$5,000; owner and builder, J. W. Warner, One Hun-

(Continued on next page.)

SUMMARY:—

The Proposed World's Fair Architects.—The Republic of America.—Its Work and Estimates.—Telegraph and the Electric-Light Water and the Oceanic Canal.—London and Boston.—The Owens Lockjaw.—Compulsory Education.—Sydney.
BUILDING SUPERINTENDENCE.—LEGAL NOTES AND CASES.—THE IMPURITIES OF WATER.—THE ILLUSTRATIONS:—The Details of the Exhibition.—Charitable Mechanic Experiments on the Strength of Beams.—Paying for Estimates.—COMMUNICATIONS:—Plastering on Brickwork.—of Architects.—Cost of NOTES AND CLIPPINGS.

THE movement in favor of taken shape in two public meetings in accordance with a call signed by mercantile organizations in of such an undertaking, tended, and although it appoint a committee to obtain and other particulars, the to the enterprise. The on the land would be trifling of utilizing the exhibition chanic Association and the Institute, a very large item the flat lands in and about advantages of accessibility West Chester Park, which suggested, will undoubtedly bridge, and southward to main tracks of the Boston & New England, and Boston at the opposite end of the by a branch through New length, could land its passenger four railways alone would great as that of Boston in the exhibition, while the direction from the building place for passengers on the different routes on the important element in estimating A very large proportion of people of the suburban town to stay an hour or so any business, repeated short ones would be the rule and mission fees would be covering this, as well as the of the New England district meeting, which set the five million, while the number of Boston is a cool sands of vacation excursion flock to New England in pleasanter place for their tractions. Still, the thrift of what they intend to do possible that circumstance terprise. If so, it is best proceedings rather than late

AFTER the discredit of Court-House and its architect circulated of late, it is p

After the discreditable stories concerning the Chicago Court-House and its architect, which have been industriously circulated of late, it is pleasant to read testimony going to

ETTS ECHANIC ON.

Exhibition

AND ART,

NOVEMBER, 1881.

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den Holliday and North sts.
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son King and Front sts.
Leon, one-story brick building (library)
north of Saratoga St.
National Bank, one-story brick building on
even Baltimore and Fayette sts.
Minter, three-story brick building, a w
Front Sts.
Hartshorn, — Mr. Samuel Wyman is erect-
ing buildings on Park Ave., between
Front Sts. —
Front-houses, one 43' front, five stories
front, four stories high, brick with
stone trimmings.
Front-houses, four 19' front three stories high,
four stories high, brick, with stone
trimmings.
Front, five stories high, brick, stone trim-
mings E. Cassell, architect.
E. Cassell is also preparing drawings
for a new Boundary Ave., for Mr. Wm.
H. 19' x 25', four stories high, of brick,
with sandstone trimmings; cost, about
\$20,000.
A congregation of Chatsworth I. M.
designed to erect a new front to their
par. Franklin and Pine sts., to be of
cost about \$20,000.
Messrs. Dixon & Kennedy are
preparing for the new Mansion House, to
be corner of St. Paul and Fayette sts.,
brick and freestone, and contain 165

The new engine-house for No. 4
C. & P. R. is to be located on Lexington
the new U. S. Post-office. It will be of
sandstone, and French Gothic in de-
sign. W. T. Wilson, architect.

The Female House of Refuge
passed ground on Baker and Carey sts.,
which they will erect buildings for
the old building at present on the site
and, rearranged for the administra-
tion, and a new dormitory for fifty in-
mates. A large laundry, containing
necessary for its purpose, will be located
adjacent. The buildings will be ready for
fall. Architects, J. A. & W. T. Wil-

Continued on next page.)

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VOL. IX.

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THE New York people do not seem to be very happy in the selection of sites for their monuments. Even of the very best and most costly a large proportion are rendered comparatively insignificant by the position in which they are placed. It should never be forgotten that the neighborhood of high trees, while it may sometimes throw into relief a marble figure, is very prejudicial to the effect of a bronze statue, which is both dwarfed by their size and at a little distance becomes indistinguishable from their branching trunks. The Farragut monument just erected in New York furnishes an example of some of the worst faults of situation. Not only is it badly placed in itself, but the design of the figure with its pedestal is singularly at variance with its surroundings. As our readers know, the statue stands upon a high plinth, which expands on either side into a sort of massive *exèdre*, the arms of the seat curving forward toward the spectator, who faces the figure, and the back, both of the statue and its pedestal, being almost without interest. Evidently, the place for such a construction should be against a high wall, or some equivalent barrier, terminating a long and direct approach. Instead of this, the monument is placed somewhere toward the edge of a dilapidated grass-plot, a few feet from the street, and overshadowed by waving foliage. One side of it looks askant at Twenty-sixth Street, while its back is turned to the broad expanse of Madison Park. There is room for doubt whether a statue near the border of a public garden should face the garden itself, or the street which borders it. In the case of the Everett monument in Boston, the former alternative has been adopted, — not with the best effect; but the latter disposition seems to succeed no better for the New York statue, which suffers lamentably in dignity from the continual passing of persons behind it.

We have been favored with a letter from a prominent master stone-cutter in Cincinnati, objecting to our comments upon the circular of the Stone-Cutters' Association, published three weeks ago, which provides among other things that a fee, based on the amount of the tender, shall be paid to all members of the Association who estimate upon a given piece of work. Our correspondent thinks that we, in saying that “the architects will be the first and the worst sufferers” by this provision, adopt a one-sided view of the subject, and that we ought to take into consideration the losses which the stone-cutters have endured of late years from “cut-throat competition,” which they hope to check by the adoption of the new rule. To this we can only reply that we criticize the regulations by which the Association seeks to remedy its distress, not from any want of sympathy with the misfortunes of the trade, but because we consider them to be unjust to the architects, who are not responsible for the eagerness of bidders to obtain contracts. If, as our correspondent says, there is no longer any profit in the business, we should see nothing objectionable in a combination of the trade to raise prices, and the Cincinnati architects, if they were satisfied that no good workmanship could be obtained for their employers at prices less than the schedule rates, would gladly acquiesce in any arrangement which the stone-cutters might make among themselves; but they have good reason to resent and try to break down an attempt on the part of a certain num-

ber of men to use them as cat's-paws in securing advantages which they are unable to gain by a general agreement among their own trade. We have no hesitation in expressing our opinion that the master stone-cutters have sadly mistaken the proper means for attaining the object which they desire; and that those who think that they can make a profit out of a contract at a lower price than will probably be set by those who are paid for estimating will make it known without charge for the information; while the annoyance and expense which even the feeblest effort to maintain the rule will cause to architects must inevitably influence them to reduce their cut-stone contracts to the lowest possible limit.

THE Philadelphia *Bulletin* points out the existence of an evil which affects many other industries besides that of which it speaks, the manufacture of iron. Every one must have noticed the singular difference in the condition of the two branches of the trade. While nearly all the rolling-mills and foundries in the country are full of orders, many of them even refusing contracts to be filled months hence, the smelting furnaces barely pay expenses, and in some districts are one by one going out of operation. The explanation of this is, of course, the disproportion between the production of the raw material and the means which at present exist for working it into the forms required by commerce, and the remedy must lie either in the multiplication of manufacturing establishments or the curtailing of the amount of pig-iron delivered from the furnaces. There is now, and probably will be for years to come, a market for all the rails, beams, bolts and bars that can be produced in the country; but, as the *Bulletin* remarks, the uncertainty of political affairs, on which depends the question whether iron industries shall be in future, as now, fostered by a heavy protective tariff, or abandoned to foreign competition, practically prevents the construction of new mills. The cost of the plant for the best modern processes of puddling, forging, rolling and steel-making is enormous, and no prudent capitalist or corporation can afford to invest money in works which may at any moment be thrown out of employment by the passage of a free-trade act. Whether such legislation would be beneficial to the people at large or not is an open question; but there can be no doubt regarding the evil effect upon all parties of the uncertainty which hangs over this, as well as other industries. Foreigners reproach us with persisting in the use of antiquated and wasteful processes and machinery, which have long been discarded in Europe, but the reluctance of manufacturers to put additional capital into their business, so long as they are able by means of protection to obtain a fair return from that already invested, is, under the circumstances, quite natural.

At the annual meeting of the United States Electric-Light Company, recently held, some interesting facts were mentioned in regard to the economy of the electric light as compared with gas for house use. The United States Company controls the Maxim patents for incandescent lamps, and already has a considerable number in use, so that the opinion of its secretary, Mr. Curtis, that at present the light from incandescent apparatus is more costly than that from illuminating gas in the proportion of about three to two is entitled to great weight. Mr. Curtis added very frankly that the only practically useful way of lighting small rooms was by incandescence, and that for this purpose the system must yet be regarded as occupying the position which gas-lighting held when first introduced; with, however, a very favorable prospect for the speedy introduction of improvements which will both cheapen and improve the processes used. For out-door or hall illumination the success of the electric light is already assured. The delay in completing the new factory at the corner of Avenue B and Seventeenth Street has compelled the company to decline many contracts, but every day shows an increase in the number of lamps. In New York streets the white light of the electric arc has long ago become too common to attract notice, and many of the late contracts are for the illumination of the larger stores and offices.

QUIET preparations are making for an underground railway in the city of Chicago. According to the *Tribune*, right of way has already been secured for a considerable part of the route, and all the funds needed to build and equip the road have been subscribed. The projectors of the enterprise wish to have the terminus of the line south of the river, and are dis-

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cussing the practicability of buying or leasing from the city the La Salle Street tunnel. If this could be done, and right of way obtained through La Salle Street, one of the main arteries of the business portion of the town, the new road would have a flattering prospect of success. The cost of construction would be considerable, since much of the ground, though not rocky, is soft and treacherous, but the engineering difficulties are by no means equal to those which must be met in New York. In Boston, where even those who opposed the elevated-railroad schemes most vigorously are beginning to call for one underground, the conditions are, for the greater part of the city, much the same as in Chicago, and the details of any construction of the kind there would be watched by Eastern engineers with much interest.

We have before had occasion to speak of the Chevalier da Silva, architect to the King of Portugal, and one of the most distinguished men in the profession. Our younger readers may perhaps be glad to know something of what constitutes the life of such a man in Europe, and what are the duties to which he devotes himself outside of his professional employments. This we can judge of from the list of his printed works, which we find in a foot-note to a review of his latest book. His first important publication was a history of past and contemporary architecture in Portugal and other countries, which appeared in 1833. Next, after a long interval, came a descriptive account of Portugal, accompanying a series of photographic views; and in 1865, a monograph on the work executed under his direction in the Palace of Ajuda. In 1867 were published two archaeological treatises, one on the proposed restoration of the Church of Belem, and the other on the signification of the marks cut on various ancient structures in the kingdom. A historical dissertation on Portuguese architecture from the twelfth to the eighteenth century was the next venture, followed, three years afterward, by an octavo pamphlet on a system of sewerage for the city of Lisbon. From that time to the present his leisure hours have been mainly occupied in the preparation of his most important literary work, the *Elements of Archaeology*, founded upon the well-known *Abécédair d'Archéologie* of his constant friend Arcisse de Caumont, but containing much new matter. He has not, however, been too busy to organize and conduct to vigorous activity the Royal Association of Portuguese Architects and Archaeologists, of which he was the first President, and, seconded by his colleagues, to found the Archaeological Museum, now established in the ancient Carmelite church at Lisbon, and rapidly gaining reputation as one of the most interesting collections in Europe. Few men can look back to a greater number of honorable purposes successfully carried out in the course of a life whose activity is yet undiminished, and young architects especially, who are apt to think that their profession cuts them off from full participation in the higher pursuits of cultivated men, may learn much from this example.

In consequence of the recent rise in the Ohio River and its tributaries, several hundred cellars in Pittsburgh and Allegheny City were flooded, to the great discomfort of those who occupied the houses to which the cellars belonged. Rheumatism, and other effects of living in a damp atmosphere, began to appear among them, and the Board of Health at Allegheny, desiring to prevent the spread of such diseases, ordered that all the overflowed basements should be pumped out before a certain day, under the penalties provided for disobedience to its directions. As the occupants of the houses affected had of course no means of complying with this order, the City Fire Department perceived in it an opportunity for making a little money, and voted that one of the fire-engines should be detailed to pump out cellars at the rate of eight dollars each. This, though probably meant as a favor, was not received with much gratitude by the citizens or the newspapers. The *Pittsburgh Telegraph* very pertinently says that as the flooded houses were built in conformity with the grades established by the city, their owners are not responsible for the damage caused by the failure of the city engineer to provide for such contingencies, and that if the existence of standing water in the basements of the low parts of the town menaces the health of the citizens, it should be removed at the public expense. There is good foundation for this argument, and perhaps some house-owner may see fit to carry the matter to the courts. Meanwhile, it would seem worth the while of some private proprietor of a portable steam-engine and a rotary pump to enter into competition with the Fire Department for the business of removing the water.

THE project for reclaiming the Florida Everglades appears to meet with the favor of certain capitalists, and a company has been formed, called the Atlantic and Gulf-Coast Canal and Okechobee Land Company, which comprises among its directors several very rich and able men. It is thought that the newly drained lands will prove well adapted for the production of sugar-cane and indigo, and preparations will soon be made for colonizing the territory by means of regular agencies in Europe, particularly in the Mediterranean provinces, whose climate most nearly resembles that of Southern Florida. At present, the great Florida swamps are said to be free from malaria; whether this healthfulness will continue after they are drained and occupied by settlers is perhaps doubtful. While an efficient subsoil drainage is the best of all safeguards against malarial poisoning, the mere abstraction of the surface water from a territory previously overflowed is a very different thing, and the exposure of the bed of a pond by drawing off its contents, often, in fever districts, gives rise to a violent outbreak of the disease in its immediate vicinity. No doubt the projectors of the enterprise are quite aware of this, and intend to take proper precautions, — indeed, the high valuation at which the land is said to have been "capitalized" would seem to indicate that the cost of some efficient measures against such dangers have entered into their estimates; so that we may hope for the colony a reasonable immunity from those disorders which so seriously affect the prosperity of many other Southern States.

WITHOUT even the excuse of general distress and despair, certain labor reformers seem to have undertaken to revive here the cowardly ruffianism which has sometimes disgraced England during the protracted strikes of the last twenty years. The attempt at Milwaukee the other day to blow up a locomotive, with the men on it, by means of a nitro-glycerine bomb, is perhaps the worst case which has come to our notice, but another is reported from Chicago which falls little short of it in savage malice. It seems that a strike took place there among the stove moulders some time ago, but the market did not sustain it, and the foundries resumed work without making the desired concessions; but their miscalculation appears to have rankled in the minds of the strikers, and a week ago two men employed in the Chicago Stove Works were on the point of pouring the melted iron for a casting into the mould, when one of them noticed an unusual appearance about it, and stopped for a further examination, which disclosed two pounds of gunpowder concealed in the mould; quite enough, if the suspicion of the men had not been aroused in time, to have thrown the melted metal by its explosion all over the room, to kill and maim scores of innocent persons. The whole history of English "rattening" and mill-burning contains nothing so disgraceful as these attempts at wholesale assassination.

SAN FRANCISCO is complaining of a grievance which is usually felt most heavily in times of commercial depression, — the over-valuation of property for purposes of taxation. No doubt it is difficult for assessors to form a correct judgment of real-estate values in times when sales are infrequent, but no one can compare the assessed valuations with the selling price in many of the transactions which have taken place since the revival of the real-estate interest without feeling that injustice is often done to tax-payers by mistakes which might have been avoided. It has not been very unusual of late to see certain estates sold at nearly double the assessed valuation, while those of another class will uniformly go at much less than the valuation, often not more than two-thirds. In such cases the owners of the over-valued property have good reason for complaining that an unfair proportion of the burden of taxation is laid upon them, and the more so, that the best sales are generally of the choicest estates, for which a low valuation means the saving of hundreds or thousands of dollars a year in taxes, which must be taken from the smaller and less salable properties by means of a high valuation. It would seem only reasonable that the actual rental should be taken as a guide for assessing the value from year to year of a given estate, as well as of others similarly situated, but occupied by their owners, and such a rule would give welcome relief to those proprietors who now find it impossible to pay taxes and repairs from the rent of their property, whose unfavorable situation, and consequent diminished value, can be estimated much more correctly from this fact than by the hasty glance at the outside which is all that assessors generally see fit to give.

CIVIC MONUMENT.

THE Army and Navy designed by Martin Milner Common, is the most pretentious in its scheme of any war memorial in New England. It is a columnar monument, more than seventy feet high, made of granite, and decorated with nine statues and four bas-reliefs. From the four corners of the base project pedestals, each supporting a bronze statue. Around the base of the column are four emblematic figures of the North, South, East and West, executed in high relief in granite. The top of the monument is surmounted by a bronze statue of the Genius of America. This structure has also passed under the ban of public disapprobation. What are its faults? Looked at from a sufficient distance to enable the eye to take in the whole mass, it appears disjointed, ill balanced, and hard. The figures at the base of the monument, though intended to form a part of its architectural and decorative effect, appear like black dots. As the monument is approached, these impressions do not improve. The details lack interest. There is no monumental character in the statues: they are made for themselves, and not as a part of a structure.

Once accepting the design as one inherently appropriate to the occasion, how should it have been notable examples of columnar design, the Column of July, in Paris.

As an introduction to what some observations by a writer

"Columns having a wider human sentiment have taken no little appropriateness. The obelisk, and receive decoration of forms that go up into the Egyptian manifested the loyalty to its proper expression of the divinity of that feeling. high, a moving, supporting obelisk; a column carries a aspiration; a column carries the surface of his columns that they appear elastic. They imply who took in one hand a monument upon it, and it became a stately character of all architectural forms suggests the greatest variety every direction, and when dec object of the richest beauty. umus are found in Rome; in famous churches of Italy. every one. The Egyptian pol because polish in itself had any material like granite must have is not perfect without polish. forms requires as much skill as fact, the full beauty of the for a plain form or surface for the form becomes valuable and art terfuges of incompetency, and merit of the columns and obelisks size or great age: nothing nificance of matter unless they

It has been found desirable to these articles were based. Intended have been extended so as to take the neighborhood of that city. I ment the illustrations of these to show what the master-hands of fo similar ideas and sentiments: the strongest arguments in support o to make. — Eds. AMERICAN ARCHT

June 25, 1887

ties to unite with it in the erection of a building for their joint use.

Brooklyn.

BUILDING PERMITS.—*Keep St.*, s. s. 120' e. Marcy Ave., 2 three-story brownstone dwellings; cost, \$7,000 each; owner and builder, John Sunderlin, 39 Ross St.; architect, John I. Jones.

On Pier near Foot of State St., one-story frame storage shed; cost, \$8,200; owner, Franklin Woodruff, 141 Remsen St.; builder, Thomas Stone.

Bergen St., s. s. 240' e. Flatbush Ave., two-story brick stable; cost, \$6,000; owner, Robert McKnight, 87 St. Marks Pl.; builder, James Shaanon.

Hoyt St., Nos. 16 and 18, w. s. 115' n. Livingston St., three-story brick manufactory; cost, \$3,181; owner, A. Friedrick, on premises; architect, Fred. E. Lockwood; builders, P. Carlin & Sons.

Carlton Ave., w. s. about 250' n. of Myrtle Ave., four-story brick hospital; cost, \$22,000; owner, H. H. Wood, architect, M. J. Morrill; builders, James Lock and Wright & Brook.

Hart St., s. s. 211' n. Throop Ave., 2 two-story brownstone dwellings; cost, \$4,500 each; owner and architect, M. C. Baker, 194 Hart St.; builder, F. N. Wood.

Bergen St., s. s. 350' e. Brooklyn Ave., two-story brick stable; cost, \$4,500; owner, H. F. Wood; architect, John Munford; builders, James Ashfield & Son and John Lee.

Hoppey St., s. s. 122' 8" n. Marcy Ave., 2 three-story brownstone dwellings; cost, \$11,000 each; owner and carpenter, John F. Ryan, 112 Rodney St.

ALTERATIONS.—*Fulton St.*, s. w. cor. Utica Ave., one-story brick extension, interior altered; cost, \$6,000; owner, John Harrison, on premises; architect, Jean D. Reynolds; builders, P. F. Bruner and John J. Quinn.

Cumberland St., e. s. 250' n. Myrtle Ave., interior alterations; cost about \$3,000; owner, H. H. Wood; architect, M. J. Morrill; builders, J. Lockwood and Wright & Brook.

Pierpoint St., No. 69, make full st'y of attic on main building and add one st'y on extension, tin shed; cost, \$3,000; owner, Otto Heinze; builder, E. Snodder.

Fifty-third St., n. s. 125' n. Fourth Ave., raise building seven feet, interior alterations; cost, \$3,000; owner, Chas. A. Willard, Third Ave. and Twenty-ninth St.; builder, Daniel Ryan.

CHURCH.—The corner stone of the new Roman Catholic Church of the Holy Family, in Thirtieth St., between Fourth and Fifth Aves., Brooklyn, was laid last week. It will be of brick, with wooden superstructure, 60' x 45', and will cost about \$30,000. It will be finished by October.

Chicago.

BUILDING PERMITS.—J. Meyer, three-story brick store and dwell., 20' x 58', 477 N. Clark St.; cost, \$5,000.

A. Bryant, two-story brick store and dwell., 50' x 70', 2,909 Michigan Ave.; cost, \$30,000.

Chicago Society Near Jerusalem, dwell., 60' x 90', Van Buren St., near Michigan Ave.; cost, \$30,000.

Kent Bros., four-story brick store and dwell., 50' x 100', 512 State St.; cost, \$25,000.

M. Lenens, two-story brick store and dwell., 20' x 57', Twenty-ninth St.; cost, \$3,200.

C. Rounsavell, shop, 60' x 60', 19 Clybourne Ave.; cost, \$3,500.

Chicago Pavement Co., one-story factory, 70' x 70', Clinton and Nineteenth Sts.; cost, \$40,000.

J. Kenuelly, three-story brick dwell., 22' 8" x 46', 109 Noble St.; cost, \$4,000.

J. B. McCormick, three-story dwell., 22' x 39', 419 Honore St.; cost, \$4,000.

E. J. Ward, two-story brick barn, 22' x 40', 620 Dearborn Ave.

R. L. Fay, three-story brick store, 50' x 77', Dearborn Ave. and Michigan St.; cost, \$12,000.

J. Q. Adams, five-story brick store, 100' x 126', 330-36, Adams St.; cost, \$100,000.

J. Paul, two-story brick dwell., 24' x 44', 69 Walton Pl.; cost, 6,000.

W. Mollen, same, 20' x 57', 426 n. of La Salle St.; cost, \$5,000.

B. P. Hutchinson, 8 two-story brick stores and dwell., 100' x 25', 73-81 Harrison St.; cost, \$8,000.

Mrs. Todd, three-story brick dwell., 22' x 64', 464 N. La Salle St.; cost, \$5,000.

S. E. Beers, 5 two-story dwellings, 21' x 34', 3,529-37 Homer St.; cost, \$5,000.

H. Bierman, brick dwell., 22' x 52', Huron St., near Wood St.; cost, \$3,000.

H. Delois, one-story brick dwell., 22' x 14', 421 W. Chicago Ave.; cost, \$4,400.

O. S. Wheeler, two-story brick dwell., 45' x 50', State St., near Schiller, cost, \$15,000.

H. Baker & Co., one-story brick dry-house, 52' x 70', Paulina St., near Blue Island Ave.; cost, \$5,000.

Mrs. Potter Palmer, four-story brick store and dwell., 73' x 136', 1,433 State St.; cost, \$10,000.

F. S. Wright, two-story dwell., 24' x 42', 883 Jackson St.; cost, \$4,000.

—Slater, same, 22' x 66', 9 Curtis St.; cost, \$4,000.

S. W. McCay, three-story brick dwell., and barn 25' x 40', Cass and Michigan Sts.; cost, \$4,000.

BANK BUILDING.—Messrs. Burling & Whitehouse, architects, are completing the designs for the First National Bank. The building will have a frontage of 190' on Dearborn St. and 95' on Monroe. It will be six stories high.

STORES.—Plans have also recently been completed by Messrs. Burling & Whitehouse for the largest block of buildings now in course of construction in the city. It will be 125' x 225', and six stories high. The building is the joint enterprise of Marshall Field, E. H. Sheldon, and Mrs. McCagg. It will be erected on the north side of Adams St., between Fifth Ave. and Franklin St. The probable cost will be \$185,000. The remainder of the frontage of this block on Adams St., will be occupied by two buildings to be erected by the Chicago, Burlington & Quincy Railroad Company, and Mr. Conrad Furst.

HOUSES.—Mr. C. O. Hansen has drawn plans for a two-story house for Mr. Robert Berger, to be built at the south-east corner of State and Goethe Sts.

A block of six dwelling-houses, 300' x 120', is building on the corner of Throop and Congress Sts., for M. A. Gillespie; William Thomas, architect; cost, \$15,000.

L. H. Hallberg has recently drawn plans for a two-story building by J. R. Cormack on Tichen Avenue.

APARTMENT-HOUSES.—Three flats are building on the corner of Seigrist and Congress Sts., for P. O. Lundstrom. They are 25' x 60', three stories and basement. The cost will be about \$5,000. A three-story flat building, 28' x 85', is to be built on Erie St., between Dearborn and State Sts., for A. B. Clark, Esq.

Cincinnati.

BUILDING PERMITS.—Chas. Schmoldt & Co., three-story brick, Moore St., near Liberty St.; cost, \$4,000.

Wm. Diehl, two-story brick, Addison St., near Cook St.; cost, \$6,000.

Samuel Kuhn, three-story brick, 264 West Ninth St.; cost, \$5,000.

Fred Webber & Bro., two-story brick, s. w. cor. Jefferson and Hammond Sts.; cost, \$3,300.

Fred Webber & Bro., two-story brick, s. side Hammond St., near Vine St.; cost, \$23,000.

Henry Rothaupt, repair No. 163 Broadway; cost, \$2,000.

D. C. Tudor, two-story brick, No. 488 Baymiller St.; cost, \$5,000.

F. W. Handy, addition to five-story store, from s. w. cor. Third and Vine Sts.; cost, \$3,000.

Henry Wald, four-story brick, No. 461 Walnut St.; cost, \$15,000.

St. Auburn Episcopal Church, addition to stone church; cost, \$5,000.

M. Douglas, two-story brick, Albion Place, Mt. Auburn; cost, \$8,000.

J. H. Overbeck, addition to St. Joseph College, Eighth St., near John St.; cost, \$5,000.

J. H. Overbeck, two-story brick, David St., near John St.; cost, \$4,000.

STRIKES.—The strike of the tanners and slaters has ended in favor of the journeymen, all the shops having agreed to the advance in wages, and the bosses have also been compelled to recognize the Union. The pay for this class of labor is now \$2.25 to \$2.50.

Denver, Col.

BUILDING PERMITS.—Among the building permits issued since last report are the following:—

Anthony Sweeney, two-story brick, stone dressing, 41' x 60', and brick barn, 24' x 30', Parkview, between Fourteenth and Fifteenth Sts.; cost, \$10,000.

William H. Craig, two-story brick dwell., 22' 6" x 50', Arapahoe St., between Twenty-fourth and Twenty-fifth Sts.; cost, \$4,000.

John Milheim, double two-story brick, 41' x 66', California St., between Seventeenth and Eighteenth Sts.; cost, \$10,000.

Ella Brummett, two-story brick, 45' x 66', Champa St., between Twenty-fourth and Twenty-fifth Sts.; cost, \$8,000.

Ghost & Post, two-story double brick dwell., 46' x 42', Lawrence St., between Twenty-first and Twenty-second Sts.; cost, \$4,500.

W. J. Swift, two-story brick dwell.; cost, \$6,000.

Geo. Fritsch, brick store; cost, \$5,000.

CLUB-HOUSE.—A two-story brick club-house is being erected on Arapahoe St., between Twenty-first and Twenty-second Sts.; E. Anthony, architect; cost, \$16,000.

SCHOOL-HOUSE.—The contract for the superstructure of the new "Gilpin School" has been awarded to Hallack & Howard; cost, \$38,510. The contract price of the foundation was \$6,495. H. S. Roesslaub, architect for the Board of Education.

New York.

BUILDING PERMITS.—Thirtieth St., Nos. 105 and 107 s. e. four-story brick stable; cost, \$10,000; owners, Johnston & Hart, 132 Fourth Ave.; builder, John McCool.

One Hundred and Twenty-fifth St., n. s. 150' x Ninth Ave., four-story brick apartment-house; cost, \$12,000; owner, Catharine Fretsch, 232 West Thirty-ninth St.; architect, F. T. Camp; builder, John Fretsch.

One Hundred and Twenty-fifth St., n. s. 175' x Ninth Ave., four-story brick apartment-house; cost, \$10,000; owner, Catharine Fretsch, 232 West Thirty-ninth St.; architect, F. T. Camp; builder, John Fretsch.

One Hundred and Twenty-fifth St., n. s. 200' x Ninth Ave., four-story brick apartment-house; owner, Catharine Fretsch, 232 West Thirty-ninth St.; architect, F. T. Camp; builder, John Fretsch.

Fourth Ave., n. e. cor. One Hundred and Sixteenth St., 5 four-story brownstone flats; cost, \$15,000; owner and builder, Patrick H. Lalor, 121 East One Hundred and Sixteenth St.; architect, J. H. Valentine.

Avenue A, n. e. cor. One Hundred and Twenty-second St., 2 three-story brick stores and tenements; cost, each \$9,000; owner and builder, Jos. Murray; architect, J. H. Valentine.

Avenue A, e. s. 119' 11" n. One Hundred and Twenty-second St., 9 three-story brick flats; cost, each \$9,000; owner and builder, Joseph Murray, 315 East One Hundred and Sixteenth St.; architect, J. H. Valentine.

Tenth St., No. 251 e. five-story brick tenement; cost, \$13,000; owner, Ernst Von Au, on premises; architect, J. Hoffman.

Fourth Ave., No. 63 four-story brick store and tenement; cost, \$13,000; owner, Franziska Wirrbauers, P. Schaeffer and Henry W. Wall, architects.

Thirtieth St., No. 133 w. rear four-story brick tenement; cost, \$7,000; owner, Mrs. Ranney, et al, 156 Fretsch, Joyce & Carpenter.

Leonard St., Nos. 113 and 115, five-story brick store; cost, \$12,000; owner, E. S. Jaffray, 350 Broadway; architect, H. S. Jaffray; builder, R. L. Darragh.

Sixty-fourth St., n. s. 225' n. Second Ave., two-story brick stable; cost, \$3,500; owner, M. Parsons, 812 Lexington Ave.; architect, F. S. Barnes; builder, Parsons.

First Ave., s. w. cor. Sixty-first St., 4 five-story brick tenements; cost, each \$10,000; owner, Joseph Redman, 81 East Fifty-fifth St.; architect, A. B. Ogden; builders, Cook & Higgins.

Sixty-first St., s. s. 91' n. First Ave., 3 five-story brick tenements; cost, each \$10,000; owner, architect and builders, same as last.

Sixty-first St., n. s. 210' e. Second Ave., 4 five-story brick tenements; cost, each \$10,000; owner, architect and builders, same as last.

Second Ave., s. w. cor. Seventy-third St., six-story brick cigar factory; cost, \$35,000; owners, Suro & Newmark, 78 Park Pl.; architect, A. B. Ogden.

Second Ave., w. s. 48' n. Seventy-third St., five-story brownstone store and tenement; cost, \$10,000; owners and architect, same as last.

Seventy-third St., s. s. 110' n. Second Ave., one five-story brownstone tenement; cost, \$10,000; owners and architect, same as last.

Madison Ave., s. w. cor. Sixty-second St., five-story brick and brownstone dwellings; cost, from \$20,000 to \$40,000 each, total \$150,000; owner and builder, Ira E. Doying; architect, J. E. Ware.

Eighteenth St., No. 431 e. four-story brick stable; cost, \$10,000; owner, John Rickman, 431 East Eighteenth St.; architect, Wm. Jose.

White St., Nos. 83 and 85, 2 five-story iron stores; cost, each, \$25,000; owner, Wm. P. Dixon, 70 Wall St.; architect, J. M. Slade; builder, W. G. Slade.

Broadway, n. e. cor. Thirtieth St., two-story brownstone store and offices; owner, O. L. Jones, 1215 Broadway; architect, Geo. A. Freeman, Jr.

One Hundred and Twenty-sixth St., s. s. 175' n. Sixth Ave., 4 three-story stone dwellings; cost, \$12,000; owners, Smith & Kasines, 7 Pine St.; architects, Thom & Wilson.

Broadway, No. 626, through to Crosby St., six-story iron store; owner, Jacob Rothschild, 68 West Fourteenth St.; architect, Henry Fernbach.

East Side Boulevard, n. w. cor. Fifty-ninth St., four-story stone tenement; cost, \$12,000; owner, A. J. Kerwin, Fifty-eighth St., foot East River; architect, A. Wagner.

East Side Boulevard, w. s. 23' n. Fifty-ninth St., four-story brownstone tenement; cost, \$12,000; owner, Kerwin, Fifty-eighth St., foot East River; architect, same as last.

East Side Boulevard, s. w. cor. Sixtieth St., five-story brick and stone tenement; cost, \$14,000; owner and architect, same as last.

ALTERATIONS.—East Fifty-fourth St., Nos. 11 and 13, mansards removed, wall carried up, extensions, alterations, etc.; cost, \$4,000; owners, M. Rindskopf and Jacob Hays, on premises; builder, J. Banta.

Lexington Ave., n. w. cor. Fifty-second St., raise one st'y; cost, \$4,000; owner, Dr. T. G. Thomas, 294 Fifth Ave.; architects, Silliman & Farnsworth; builders, D. C. Weeks & Son and Lakey & Buckbee.

Nineteenth St., No. 120' n. Four and one st'y brick extension; cost, \$4,000; owner, Edward Jansen on premises; architect, Wm. Jose.

North Washington Sq., No. 23, four-story brick extension, etc.; cost, \$11,000; owner, E. B. Robinson, on premises; architect, Geo. B. Post; builder, Peter Looman.

Twentieth St., No. 106 e. two-story brick extension, new staircase, etc.; cost, \$4,000; owner, J. A. Davenport, 11 Pine St.; architect, C. C. Haigh; builders, J. M. Dodd, Jr., and Smith & Crane.

Eleventh Ave., s. e. cor. Fifty-seventh St., raise one st'y, factory; cost, \$8,000; owner, Thomas A. Hart Co., 60 White St.; mason, James Cox; carpenter, S. E. Mapes.

Forty-sixth St., s. s. 115' n. Fifth Ave., rebuild gallery in front of church, etc.; cost, \$10,000; owner, Fifth Avenue Baptist Church Society, No. 2 West Forty-sixth St.; architects, D. & J. Jardine.

Forty-third St., No. 16 e. to be altered for private dwell.; cost, \$6,000; owner, Mary A. Hudson, et al, 20 Lafayette Pl.; architects, W. A. Field & Son; builder, J. J. Tucker.

Forty-first St., No. 12 e. rear, three-story brick extension on front; cost, \$4,000; owner, J. W. Dimick, 268 Canal St.; builder, Jno. H. Whitenack.

Forty-sixth St., No. 49 w. three-story brick extension; cost, \$4,000; owner, Fred H. Howell, 49 West Forty-sixth St.; architect, H. H. Holly; builder, W. T. Lamb, Jr.

LABOR MARKET is very uneasy and some masons are paying an advance on \$4. Carpenters are also agitating for \$4.50 per day.

BUILDING MATERIALS are firm, and we have again to note an advance in the price of brick.

APARTMENT-HOUSE.—On the n. w. cor. of Madison Ave. and Fifty-second St., an apartment-house 15' x 85', is to be built from designs of Mr. Carl Pfeiffer.

OFFICE-BUILDINGS Nos. 46 and 48 Broadway are being torn down; the new building will have a brick front in place of iron as originally designed by the architects, Messrs. D. & J. Jardine; Mr. Alex. Brown, Jr., is the builder.

Nos. 14, 16 and 18 Broadway are to be rebuilt by Messrs. Smith and Producers & Co., to whom the contract has been awarded by the Messrs. Shaw of Hoboken.

STABLE.—The old St. Germain Livery Stable, Twenty-second St., between Lexington and Fourth Aves., is to be entirely remodelled for Mr. Abram S. Hewitt, from designs of Mr. H. Edwards Ficken.

Philadelphia.

BUILDING PERMITS.—Phillip St., s. e. of York St., 3 two-story dwellings, 12' x 27'; Benj. Walker.

Randolph St., n. of Oxford St., 3 three-story dwellings, 16' x 30'; W. Wolf, contractor.

Cumberland St., between Mill and Armat Sts., one-story dry-house, 30' x 21'; Trot & Fisher, contractors.

Girard St., w. of Thirtieth St., three-story dwell., 22' x 13'; J. B. Doyle, contractor.

Smick and Jefferson Sts., three-story store and dwell., 21' x 34'; W. Schneitman, owner.

Valant St., No. 819, four-story building, 21' x 33'; J. H. Taggart & Son.

Third St. and Lehigh Ave., three-story tavern, 18' x 60'; Michael Fox, owner.

Ninth St., s. of Cumberland St., two-story stable, 60' x 90'; P. R. Theobald, owner.

First Ave., s w cor. Sixty-first St., 4 five-st'y brick tenements; cost, each \$10,000; owner, Joseph Redman, 81 East Fifty-fifth St.; architect, A. B. Ogden; builders, Cook & Higgins.

Seventy-first St., s s, 51' w First Ave., 3 five-st'y brick tenements; cost, each \$10,000; owner, architect and builders, same as last.

Seventy-first St., n s, 210' e Second Ave., 4 five-st'y brick tenements; cost, each \$10,000; owner, architect and builders, same as last.

Second Ave., s w cor. Seventy-third St., six-st'y brick cigar factory; cost, \$35,000; owners, Sutro & Quamark, 76 Park Pl.; architect, A. B. Ogden.

Second Ave., w s, 48' s Seventy-third St., five-st'y brownstone store and tenement; cost, \$10,000; owners and architect, same as last.

Seventy-third St., s s, 110' w Second Ave., one five-st'y brownstone tenement; cost, \$10,000; owners and architect, same as last.

Madison Ave., s w cor. Sixty-second St., five-st'y brick and brownstone dwellings; cost, from \$20,000 to \$30,000 each, total \$150,000; owner and builder, E. Doying; architect, J. E. Ware.

Eighteenth St., No. 431 e, four-st'y brick stable; cost, \$10,000; owner, John Rickman, 431 East Eighth St.; architect, Wm. Jose.

White St., Nos. 83 and 85, 2 five-st'y iron stores; cost, each, \$25,000; owner, Wm. P. Dixon, 50 Wall St.; architect, J. M. Slade; builder, W. G. Slade.

Broadway, n e cor. Thirtieth St., two-st'y brownstone store and offices; owner, O. L. Jones, 1215 Broadway; architect, Geo. A. Freeman, Jr.

One Hundred and Twenty-sixth St., s s, 175' w Sixth Ave., 1 three-st'y stone dwells.; cost, \$12,000; owners, Smith & Rasines, 7 Pine St.; architects, same as Wilson.

Bowling, No. 626, through to Crosby St., six-st'y iron store; owner, Jacob Rothschild, 55 West Fourth St.; architect, Henry Fernbach.

East Side Boulevard, n w cor. Fifty-ninth St., four-st'y stone tenement; cost, \$12,000; owner, A. Kerwin, Fifty-eighth St., foot East River; architect, A. Wagner.

East Side Boulevard, w s, 23' n Fifty-ninth St., one-st'y brownstone tenement; cost, \$12,000; owner, A. Kerwin, Fifty-eighth St., foot East River; architect, same as last.

East Side Boulevard, s w cor. Sixtieth St., five-st'y brick and stone tenement; cost, \$14,000; owner and architect, same as last.

REPAIRATIONS. — East Fifty-fourth St., Nos. 11 and 13, rear stairs removed, wall carried up, extensions, alterations, etc.; cost, \$4,000; owners, M. Rindskopf and Jacob Hays, on premises; builder, J. Banta.

Washington Ave., n w cor. Fifty-second St., raise one-st'y; cost, \$4,000; owner, Dr. F. G. Thomas; 294 Washington Ave., architects, Silliman & Farnsworth; owners, D. C. Weeks & Son and Lakey & Buckbee.

East Side Boulevard, No. 120 w, four and one-st'y brick houses; cost, \$4,000; owner, Edward Jansen on premises; cost, Wm. Jose.

North Washington Sq., No. 23, four-st'y brick extension, etc.; cost, \$11,000; owner, E. B. Robinson, on premises; architect, Geo. B. Post; builder, Peter Cam.

Twentieth St., No. 106 e, two-st'y brick extension, new staircase, etc.; cost, \$4,000; owner, J. A. Davenport, 11 Pine St.; architect, C. G. Haught; builders, M. Dodd, Jr., and Smith & Crane.

Eleventh Ave., s e cor. Fifty-seventh St., raise one-st'y, factory; cost, \$6,000; owner, Thomas A. Hart, 50 White St.; mason, James Cox; carpenter, E. Mapes.

Forty-sixth St., s s, 115' w Fifth Ave., rebuild gallery in front of church, etc.; cost, \$10,000; owner, Fifth Avenue Baptist Church Society, No. 2 West Fifty-sixth St.; architects, D. & J. Jardine.

Forty-third St., No. 18 e, to be altered for private use; cost, \$6,500; owner, Mary A. Hadden, et al, Lafayette Pl.; architects, W. A. Field & Son; builder, J. J. Tucker.

Forty-first St., No. 102 e, rear, three-st'y brick extension on front; cost, \$4,000; owner, J. W. Dimick, Canal St.; builder, Jno. H. Whitehead.

Forty-sixth St., No. 49 w, three-st'y brick extension; cost, \$4,000; owner, Fred. H. Howell, 49 West Forty-sixth St.; architect, H. H. Holly; builder, W. J. Lamb, Jr.

NOTE. MARKET is very uneasy and some masons are paying an advance on \$4. Carpenters are also waiting for \$4.50 per day.

BRICK MATERIALS are firm, and we have again to make an advance in the price of brick.

NEXT-HOUSE. — On the n w cor. of Madison Ave. and Fifty-second St., an apartment-house 25' x 12' to be built from designs of Mr. Carl Pfeiffer.

NEW BUILDINGS Nos. 46 and 48 Broadway are being put down; the new building will have a brick front, place of iron as originally designed by the architect, Messrs. D. & J. Jardine; Mr. Alex. Brown, Jr., the builder.

Nos. 14, 16 and 18 Broadway are to be rebuilt by Messrs. Smith and Producers & Co., to whom the contract has been awarded by the Messrs. Shaw of Boston.

NOTE. — The old St. Germain Livery Stable, Twenty-second St., between Lexington and Fourth Aves., to be entirely remodelled for Mr. Abram or Mr. Howard, from designs of Mr. H. Edwards Picken.

Philadelphia.

BUILDING PERMITS. — Philip St., s of York St., 3 four-st'y dwells., 12' x 27'; Benj. Walker.

Franklin St., n of Oxford St., 3 three-st'y dwells., 12' x 27'; W. Wolf, contractor.

Cumberland St., between Mill and Armat Sts., one-st'y dry-house, 20' x 21'; Trott & Fisher, contractors.

Fourth St., w of Thirtieth St., three-st'y dwell., 20' x 21'; J. B. Doyle, contractor.

Second and Jefferson Sts., three-st'y store and dwell., 21' x 34'; W. Schneitman, owner.

Fourth St., No. 819, four-st'y building, 21' x 30'; S. H. Taggart & Son.

Third St., and Lehigh Ave., three-st'y tavern, 18' x 20'; Michael Fox, owner.

Fourth St., e of Cumberland St., two-st'y stable, 60' x 20'; P. Neesh id, owner.

THE

AMERICAN ARCHITECT

AND

BUILDING NEWS

VOLUME X

JULY—DECEMBER

1881

JAMES ROSGOOD & CO. PUBLISHERS.

211 TREMONT ST. BOSTON.

HELIO TYPE

L. S. IPSEN. DEL.

SUMMARY:—

Cyclones and Western Health. — State Board of Health's Items at Coney Island. — Buffalo Soldiers' Monument at Cincinnati. — Interpreting Photographs. — The Storage of Electricity. — ARCHITECTURAL ASPECTS OF THE THE ILLUSTRATIONS:— Designs for a Country House for a Club-House. — THE WIND-PRESSURE OF CYCLONES. — THE FOUNDING OF BIG BEN. — THE PRESENT STATE OF THE THE ELECTRIC LIGHT IS ONE OF WHITEWOOD AND COTTONWOOD. COMMUNICATIONS:— Architects' Superintendents' Natural Talent. — Gas-Burners. NOTES AND CLIPPINGS. . . .

Among the many newspaper destructive cyclone in Minnesota few should contain any hint of ing-houses secure against such writer, indeed, thinks that refined objects instead of trust something may be done to give him gives no indication of the result is to be brought about winds will never be brought safely say that for the present will be more likely to lead to problem of securing buildings directing the movements of the as the citizens of the Western West are very generally of that perhaps no kind of human so large a surface to the wind in place. Timber being scarce labor and transportation dealers soon modified the substance homes into the "balloon-frame" long as it did not have to reveal have now proved their claim constructions, but this element to presume that the necessity easily made.

THE New Jersey State Board work which bids fair to be one of the few Eastern State State Fair, collecting a large surrounding country; and in 1879 the idea of popularizing concerning sanitary appliances such as were available with The attempt was so successful year on a much larger scale, circular inviting exhibits of not only plumbing appliances apparatus, food-products, school-room furniture, building materials, wall-paper and decorations to be awarded in each class the presence of the judges of the it. Foreign exhibits are goods the cost of transportation by the Board. Other exhibition bills, but no charge space. If desired, the Board place it in its permanent The Fair is to be held on September 19, and marked "care of New Jersey

BUILDING INTELLIGENCE.

(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

- 214,025. HINGE. — Benj. S. Atwood, South Abington, Mass.
214,059. TELESCOPIC LADDER. — Ferdinand W. Hotels, Brooklyn, N. Y.
214,065. WIRE LATTICE. — Bernard Kücken, Stralsund, Prussia, Germany.
214,066. COVERING FOR STEAM-PIPES, ETC. — Robert H. Martin, Brooklyn, N. Y.
214,070. TRUCK FOR MOVING BUILDINGS. — John Minahan, Scotland, Cal.
214,092. HYDRAULIC ELEVATOR. — Eli Thayer, Worcester, Mass.
214,101. SASH-BALANCE. — Finley F. Westerfield, St. Louis, Mo.
214,123. SASH-WEIGHT. — Patrick H. Griffin, Detroit, Mich.
214,134. TIMBER-FRAMING MACHINE. — Isaac Lepley, Amador City, Cal.
214,135. SKYLIGHT. — John M. Lutz, Philadelphia, Pa.
214,162. DOOR-CHECK. — Samuel A. Armstrong, Gibson City, Ill.
214,168. ELEVATOR. — Henry Baragwanath, Brooklyn, N. Y.
214,169. LOCK-STRIKE. — John H. Barnes, New Haven, Conn.
214,170. MANUFACTURE OF GAS TUBING. — Samuel Barr, Providence, R. I.
214,184. DOOR-SPRING. — Charles B. Clark, Detroit, Mich.
214,185. SPRING-HINGE. — Charles B. Clark and Henry C. Hart, Detroit, Mich.
214,206. SASH-CURD FASTENER. — Thomas P. Dunne and Paul Rath, New York, N. Y.
214,209. LATHING-HAMMER. — Homer G. Elliott, Hicksville, O.
214,211. FIRE-GRATE. — Adam C. Engert, Three Mills Lane, Bromley-by-Bow, England.
214,219. WATER-CLOSET AND BIDET BOWL. — John Flanagan, Newburg, N. Y.
214,221. ROOF FOR VAULTS. — Hamline G. French, New York, N. Y.
214,229. FIRE-TONGS. — Charles H. Lovrien, Erie, Pa.
214,238. LOCKING-LATCH. — Anders Rand, Galveston, Tex.
214,240. VENTILATING AND FIRE-EXTINGUISHING APPARATUS. — Christian Raub, St. Louis, Mo.
214,269. RATCHET SCREW-DRIVER. — Leverett E. Rhodes, Hartford, Conn.
214,273. FIRE-ESCAPE. — Lorenzo D. B. Shaw, Revere, Mass.
214,277. COMPOSITION FOR PRESERVING WOOD. — Bat Smith, Spanish Camp, Tex.
214,335. CIRCULAR SAWING MACHINE. — Daniel O. Strider, St. Louis, Mo.
214,346. ARTIFICIAL STONE. — David G. Weems, Baltimore, Md.
214,358. JAIL OR PRISON. — William H. Brown and Benjamin F. Haugh, Indianapolis, Ind.

SUMMARY OF THE WEEK.

Atlanta, Ga.

HOUSES. — Messrs. Parkins & Bruce, architects, have in hand houses for the following gentlemen: — Mr. Burkhardt, cost \$6,000; E. F. May, cost \$10,000; D. A. Beattie, cost \$6,000; Henry Miller, cost \$7,000; R. S. Jeffries, cost \$15,000; A. G. Grier, cost \$9,000; three cottages for W. R. Hill, cost \$5,000; nine cottages for J. T. Grant, cost \$15,000; and J. J. Philbury, cost \$3,000.
STORES. — Messrs. Parkins & Bruce, architects, are building a store for W. D. Grant, cost \$19,000; and one for J. C. Fuller, cost \$3,000.
BANK. — Alterations costing \$10,000 at the Atlanta National Bank are being carried out by Messrs. Parkins & Bruce.

Baltimore.

BUILDING PERMITS. — Sixteen building permits have been issued since the last report, the following only being of sufficient importance to be mentioned: — Strawberry M. E. Church, stone church and chapel, cor. Wilson St. and Park Ave.
Marine Bank, two-story brick building, n w cor. Second and Frederick sts.
E. W. Gorman, three-story brick building, Patterson Park Ave., near Tenth St.
F. Siebert, two-story brick packing-house, Carolina St., near Alice Anna St.
Henry Taylor, addition and improvements to warehouse on Baltimore st., between Eutaw and Howard sts.
John Fleckenstein, two-story brick building on Dallas St., between Gay and Chew sts.
STORE. — Mr. Charles L. Carson is preparing drawings for an addition to the store of Mr. Joel Outman, on E. Eutaw st., near Fayette St., 56' x 49', 2 stories high, cost, about \$7,000.

Boston.

BUILDING PERMITS. — During the month of June the following permits were issued: — Brick, 25'; wood, 70'; alterations, 204; boilers, engines, etc., 33; heating, etc., 29.
SEMI-ANNUAL REPORT. — The semi-annual report

AN EXHIBITION OF BUILDING MATERIALS WILL FORM A SPECIAL FEATURE

OF THE MASSACHUSETTS CHARITABLE MECHANIC ASSOCIATION'S FOURTEENTH TRIENNIAL EXHIBITION OF INDUSTRY, SKILL, AND ART, AT BOSTON, IN SEPTEMBER AND OCTOBER, 1881.

In their own brick-and-stone EXHIBITION BUILDING, having SEVEN ACRES OF Floor-Space, on Huntington Avenue and West Newton Street (near the Boston Museum of Fine Arts and Massachusetts Institute of Technology).

APPLICATIONS FOR SPACE can now be made. No charge for entry, space, or motive-power. The earliest applications first assigned. Practical manipulation especially welcomed.

AWARDS OF GOLD, SILVER, AND BRONZE MEDALS, as at all previous exhibitions, according to merit of exhibits.

THE ASSOCIATION'S GRAND MEDAL for the single exhibit most promotive of human welfare will be awarded by the American Society of Arts and Sciences.

A SPECIAL CLASSIFIED EXHIBIT OF BUILDING MATERIALS AND HOUSE-DECORATION GOODS will be made under the charge of an honorary committee of architects and building experts.

GOODS CAN BE RECEIVED by the 15th of August, and must be by the 31st. All the railroads terminating in Boston will transport goods to the Exhibition free of cost.

Open to American Inventions and Products from All Parts of the United States.

CIRCULARS, FLOOR-PLANS AND ELEVATIONS OF BUILDING FORWARDED, UPON REQUEST, WITHOUT CHARGE.

Address all applications to **GEORGE B. HANOVER** (Clerk of Board of Managers.)

MECHANICS' HALL, 40 BEDFORD STREET, BOSTON, - - - MASS.

BUILDING INTELLIGENCE.

from the office of the Inspector of Buildings shows the following permits granted for the first six months of the year:

Brick, 147; wood, 337; wood (special), 7; alterations, etc., 1274; boilers, etc., 206; heating, etc., 121. The permits for brick buildings show an advance of from 10 to 36%, and for wooden buildings, from 31 to 40% over any year except 1875, while the others are in advance of any year since the formation of the office.

Permits not written up since the first of the month, but will be ready for next issue.

HOTEL. — Ex-Alderman Flynn has decided on plans for his new hotel at City Point.

FRIGHT-HOUSE. — The N. Y. & N. E. R. R. will build a wooden freight-house, 52' x 83', on Pier No. 1, South Boston flats.

Brooklyn.

BUILDING PERMITS. — Van Buren St., s s, 291' 9" w Throop Ave., 2 two-story brownstone dwell.; cost, each, \$4,000; owner and builder, Chas. Isbill.

Van Buren St., s s, 147' 9" w Throop Ave., 3 two-story stone dwell.; cost, each, \$5,000; owner and builder, Chas. Isbill.

India St., s s, 109' e Manhattan Ave., three-story brick tenement; cost, \$5,500; owner, Daniel McCollum, India St.; architect, James Mulhau; mason, Jas. Rooney.

Elm Pl., s s, 100' s Fulton St., three-story stone theatre; cost, \$75,000; owners, B. Lewis, Wm. Barry, and Hugh Fay, 161 Monmouth St.; architect, A. Jones.

Concord St., s s, 140' w Bridge St., 2 three-story brick dwell.; cost, each \$5,500; owner, E. T. Backhouse, Carlton Ave.; builders, E. F. Smith and T. K. Schermerhorn.

Atlantic Dock, s s, 200' n Clinton Wharf, eight-story elevator; cost, \$6,000; owner, etc., Atlantic Dock.

Greene Ave., n s, 140' w Yates Ave., 4 two-story brownstone dwell.; owner and builder, John Greger, 41 Reid Ave.

Yates Ave., n w cor. Lexington Ave., three-story brick store and dwell.; cost, \$6,000; owner, J. Quinn, 469 Macon St.; architect, J. D. Reynolds.

Camden St., w s, 28' s Fulton St., three-story brick stable; cost, \$5,200; owner, Joseph Johnson; architect, F. D. Morris; builders, Thos. Donlon and Wright & Brook.

Jefferson St., near Bedford Ave., three-story brick public school; cost, \$10,000; owner, Board of Education; architect, J. W. Naughton; builders, F. J. Carlin and F. E. O'Brien.

Broadway, No. 371 E. D., four-story brick store and tenement; cost, \$11,500; owner, William R. Bell, 115 South Fifth St.; architect, C. F. Eisenack; builders, S. J. Burrows and C. L. Johnson.

Wythe Ave., between Hewes and Hooper Sts., 10 three-story brick tenements; owners, D. Appleton & Co., Bond St., N. Y.; builder, G. H. Stone.

Lorimer St., w s, 125' e Calver St., two-story brick dwell.; cost, \$5,400; owner, Gertrude Calver, cor. Calver and Lorimer Sts.; architect, E. Weber; builders, J. Reed and T. Kappie.

Hemden St., s s, 75' e Clinton St., four-story brick dwell.; cost, \$20,000; owner, William Hester, 36 Fulton St.; architect, G. L. Morse; builders, F. J. Carlin and Morris & Belover.

BUILDING INTELLIGENCE.

ALTERATIONS. — Washington St., Nos. 156 and 200, s s, repair damage by fire; cost, \$3,000; owner, Brooklyn Institute; builder, E. Smith.

Hemden St., No. 36, raise one-story; cost, \$3,000; owner, Josiah O. Low, on premises; architects, W. Field & Son; builders, Martin & Lee.

Hemden St., No. 34, improvements same as last; cost, \$5,000; owner, E. H. R. Lyman, on premises; architects and builders, same as last.

Sixth St., between North Ninth and North Tenth Sts., add two stories to the one-story building, and one story to the two-story building; cost, \$3,500; owners, Wadsworth, Mariner & Co., 207 Pearl St., New York; architect, Joseph Todd; mason, J. Doremus.

Buffalo.

HOUSES. — Prospect Ave., cor. Porter Ave., brick dwell.; cost, \$14,000; owner, Mr. John Smith; architects, Messrs. Porter & Percival.

Franklin St., cor. Allen St., brick dwell.; cost, \$18,000; owner and architect, F. W. Caulkins; builders, J. Reier & Son.

FACTORY. — Ellicott St., cor. North Division St., seven-story brick factory; cost, \$25,000; owners, Messrs. John C. Jewett & Sons; architect, Geo. J. Metzger; builders, Rumrill & Rupp.

Chicago.

BUILDING PERMITS. — C. C. Peterson, three-story brick store and dwell., 24' x 70', 601 West Indiana St.; cost, \$6,000.

A. Dixon, two-story brick barn, 50' x 94', 301 Fifth Ave.; cost, \$6,000.

City, two-story engine-house, 24' x 106', Jane St. and Ashland Ave.; cost, \$10,000.

S. Garrity, three-story brick dwell., 24' x 60', 701 Wells St.; cost, \$3,500.

J. A. Saxton, 3 three-story brick stores and dwells, 56' x 41', Sixteenth St., near Wabash Ave.; cost, \$5,000.

F. J. Nellig, three-story brick store and dwell., 22' x 50', 333 Thirty-first St.; cost, \$4,500.

Mrs. — Italian, two-story brick dwell., 24' x 43', 96 Laflin St.; cost, \$3,500.

Mrs. — Hull, two-story brick dwell., 22' x 60', 93 Laflin St.; cost, \$4,500.

J. Smith, 3 three-story brick dwells, 50' x 40', Clark and Schiller Sts.; cost, \$3,200.

S. Smith, 3 three-story brick dwells, 70' x 65', cost, \$12,000.

J. Kincaid, 5 one-story brick dwells, Indiana and Springfield Aves.; cost, \$3,000.

H. Meyer, two-story brick dwell., 21' x 64', 388 Webster Ave.; cost, \$4,000.

C. J. Hull, 3 three-story brick stores, 24' x 105', Blue Island Ave.; cost, \$15,000.

J. B. Grommes, two-story brick dwell., 28' x 70', Dearborn and North Ave.; cost, \$30,000.

B. Gale, three-story brick dwell., 25' x 70', 237 Ashland Ave.; cost, \$10,000.

H. J. Dirks, three-story brick dwell., 40' x 65', 720 Wells St.; cost, \$12,000.

J. Wenker, two-story brick dwell., 24' x 60', Le Moyne and Leavitt Sts.; cost, \$4,200.

J. Sampson, three-story brick dwell., 22' x 55', Webster Ave. and Hurbit St.; cost, \$6,000.

(Continued on next page.)

CONSTRUCTION MATERIALS SPECIAL FEATURE

SETTS
IC ASSOCIATION'S
AL EXHIBITION

L. AND ART,
ON,

OCTOBER, 1881,

DING, having SEVEN ACRES of Floor-
ing Street (near the Boston Museum
of Technology).

Large for entry, space, or motive-power. The
especially welcomed.

AL.S, as at all previous exhibitions, according

exhibit most primitive of human welfare will

MATERIALS AND HOUSE-DECORATION
Committee of architects and building experts,
and must be by the 31st. All the railroads ter-
minal of cost.

and Products from All
States.

ONS OF BUILDING FORWARDED,
OUT CHARGE.

ANOVER (Clerk of Board of
Managers.)

EDFORD STREET,

- MASS.

BUR INTELLIGENCE.

Z. Con. 5 three-story brick buildings, n e
Ave., between Biddle and Eutaw Sts.
Z. Condon, 5 three-story brick buildings, on
St., s w cor. Vincent Alley.
Hagerty, addition and improvement to
house, s w cor. Water St. and Hollingsworth

W. Yokel, three-story brick building, on
Ave., between Biddle and Eutaw Sts.

Strand, two-story brick building, in rear of
St., between Sterrett and Hamilton Sts.

Mr. Jackson C. Gott is preparing drawings

following dwellings:—

Dwellings for Mr. H. H. Keedy, at Hagers-

field, 41' 6" x 50', three-story, of brick.

for Mr. Chas. C. W. Heater, Middletown,

8' x 67' 2", three-story, of brick, with stone

ing; cost, about \$10,000.

Dixon & Kennedy are preparing drawings

elling for Mr. J. C. Stonebinner, on Eutaw

near Dolphin St., 25' x 80', three-story,

brick, with white marble and terra-cotta

cost, about \$12,000 or \$15,000.

The First Congregational Church of Balti-

about to erect a handsome addition to their

church on Eutaw St., near Dolphin St., to

8' x 64' 6", of Falls Road stone, with red sand-

ish; Messrs. Dixon & Kennedy, architects;

in Haswell, contractor.

Boston.

PERMITS.—Since our last report the fol-

lowing permits have been issued from the office of

Director of Buildings:—

Marlboro St., No. 179, for Horatio G. Cur-

sey's dwell., 24' x 62'.

St., No. 184, for Thos. B. Curtis, four-story

22' x 62' 9".

St., near Dartmouth St., for John S.

tenement-house, 20' x 30'; tenement-house,

Thomas R. White, builder.

St., near Woodbine St., for Wm. Donald-

three-story dwell., 20' 6" x 25'; Wm. Donald-

der.

St., near Albany St., for Hugh

three-story dwell. and store, 25' x 40'; Locke

builders.

South Ave., No. 198, for Mrs. D. M.

four-story dwell., 20' x 70'; D. Connery & Co.,

builders.

St., cor. King St., for John J. Soren-

family hotel, 35' x 60'; Sampson, Clark &

(Cont. on next page.)

THE AMERICAN ARCHITECT AND BUILDING NEWS.

VOL. X.

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WES R. OSGOOD & Co.

No. 293.

AUGUST 6, 1881.

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In connection with the exhibition of building appliances which is to be held in the new rooms of the Massachusetts Charitable Mechanic Association next month, it has been decided to provide for showing architectural drawings. A well-lighted series of rooms has been secured for them, and it is hoped that architects generally will lend their aid in making this not the least interesting feature of a very interesting technical exhibition. To lend additional attraction to the occasion, and bring out a large number of contributions, the committee have arranged for the award of medals for excellence in design and in construction, and wish to exhibit working-drawings as well as sketches. The main object of the undertaking being to interest architects, who can understand the technical merits of designs, however roughly indicated, it will be unnecessary to aid their effect by elaborate finish or by framing: a meritorious constructive device, a skilful plan, or a beautiful elevation, will not want appreciation, even though hastily rendered. Following the method found so successful at the annual exhibitions in Paris, it is proposed to leave the nomination of the jury to the contributors themselves. Each contributor will name four architects as judges, and the committee will count the votes and notify the four gentlemen receiving the greatest number of ballots. If any one should be unable to attend, the next in order will be notified, and so on until a jury is obtained. The attendance of architects will, it is hoped, be very large, from all parts of the country, so that contributors need not confine their nominations to any particular locality. The contributions of the jurors so chosen will be marked H. C., and debarred from competing for awards. Free tickets of admission will be issued to contributors, which can be obtained from the committee. Contributions, accompanied by nominations for members of the jury, may be sent at once to any member of the committee, or to the editors of the *American Architect*. No contribution will be received after September 1. The committee consists of Mr. John S. Damrell, Mr. Henry A. Turner, and Mr. T. M. Clark, all of Boston.

A good deal of feeling has been aroused in Chicago by a proposition to reduce the fire-limits, so as to allow the erection of wooden buildings in the less thickly settled portions of the city. The ostensible reason for the introduction of the measure is the desire to reduce the cost of workingmen's cottages,—a rather unfortunate argument, since it is easy for its opponents to show that at present prices the first cost of a brick building of that class is little, if at all, greater than that of a frame cottage; while the saving in repairs and fuel will make it much the cheaper of the two at the end of a few years. The disadvantage of permitting wooden buildings to be constructed in situations where they are certain to be surrounded by those of masonry within very few years is obvious. Such buildings, sandwiched in between brick houses and stores, form a standing menace to the whole district in which they occur, and the example of New York and Boston, where wooden fire-traps of the most dangerous description, a century or more old, alternate with the most costly buildings in the city, shows that the

fire, once incurred, can never be removed. A similar measure has unhappily already become law in New York, where its evil effects will be still more quickly and more seriously felt than would be the case in Chicago, partly by reason of the rapidity with which the limited remaining area of Manhattan Island is being covered by the solid blocks of the advancing city, and still more on account of the costly character which distinguishes the average New York building from that of all other cities, and by so much increases the amount of property which will be exposed to perennial risk by the neighborhood of cheap, inflammable structures. No doubt the self-interest of short-sighted real-estate speculators has much to do with the promotion of such measures, which should be resisted by all who interest themselves in building matters. Among these, the insurance companies might be expected to be the most energetic in their remonstrances, but so far they appear to have given the subject no attention whatever. An increase of rates on brick buildings situated outside of the new reduced limits would be only just to the policy-holders and the companies; but the timely warning of such increase would do more than anything to avert the legislation which would render it necessary.

An interesting case under the New York Building Law is now before the courts, and its decision will be a matter of interest to all architects who have occasion to practise in that city. Not long ago the present owners of a large house on the corner of Fifth Avenue and Fifty-second Street applied to the Building Bureau for permission to put two additional stories on the building, making it six stories high, with walls eighty-nine feet above the curb. The statute now provides a certain rather excessive thickness of walls for buildings of this height, and as those of the structure in question, built some time ago, would fall below the limit, the permit to alter was, as in scores of similar cases, refused on the ground that the requirements of the law would not be complied with. The next step, under such circumstances, usually is to request the appointment of a board of examiners, whose constitution is fixed by the statute, and who may recommend that the provisions of the Act be modified to meet the special case. If the examiners consent to make this recommendation, the chief of the Bureau may authorize a special exception to be made from the statute in accordance with the recommendation, but without such reference and recommendation, no deviation from the letter of the law is permitted. The owners of the house having referred the matter in due form, and received a favorable reply from the examiners, applied to the Bureau, after the usual course, for a new permit, in accordance with their recommendation. Much to their surprise, it was refused, and the Bureau persisting in its refusal, the owners appealed to the Supreme Court, which by law takes cognizance of cases under the Building Act, for a mandamus to compel the issuing of the permit. The mandamus was granted, but the Bureau in its turn appealed to the highest court, and succeeded in obtaining a stay of proceedings until the decision on the appeal.

JUDGE CULLEN, in granting the stay of proceedings, expressed his opinion that the terms of the law required the favorable action both of the Board of Examiners and the Bureau to authorize any deviation from the letter of the statute, with the intention of limiting in such cases the discretionary power of the Bureau, but not of providing an appeal from its decisions. If it were made compulsory on the Bureau to confirm the judgments of the examiners, its discretionary authority would be abrogated, and, as the judge said, it would become "a mere conduit for the transmission of applications to the examiners." This argument seems forcible, and as an appeal is still left, we presume, from the superintendent's decisions to the courts, there is much to be said in favor of clothing him with all reasonable authority, and holding him to a proportionate responsibility. That the recorded approval of an impartial board should be necessary to any deviation from the strict meaning of the law is important as guarding against too great laxity of administration, and if any superintendent should show himself disposed to surpass even the examiners in strictness, the public will gain as much as private proprietors will lose. For the latter, the proper remedy against the needless hardships which they sometimes suffer under the present statute is not the weakening of the superintendent's authority, but

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August 6, 1881

BUILDING INTELLIGENCE.

(Reported for The American Architect and Building News.)

(Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive corroborating information, especially from the smaller and outlying towns.)

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

244,734. **SASH-FRAME**.—Joseph Mlyston, St. Louis, Mo.
244,741. **WOOD-TURNING LATHE**.—Henry J. Colburn, Fitchburg, Mass.
244,749. **ROLLING-MACHINE**.—John Hammond and William L. Nolan, San Francisco, Cal.
244,754. **TRY-SQUARE AND BEVEL**.—George B. Kirshman, New York, N. Y.
244,759. **MASTER-KEY LOCK**.—Dwight K. Miller, Philadelphia, Pa.
244,762. **STEAM-RADIATOR**.—Robert C. Paul, Frostburg, Md.
244,767. **PAINT-CAN**.—William F. C. Quehl, St. Louis, Mo.
244,775. **DOOR-HANGER**.—Walter D. Smith, Philadelphia, Pa.
244,811. **ROLLING STEEL BEAMS**.—Anthony C. Klonan, Allegheny, Pa.
244,822. **LOCKING-LATCH**.—John H. Barnes, New Haven, Conn.
244,834. **CURTAIN-FIXTURE**.—Charles E. Bates, Cheshire, Conn.
244,847. **MOULD FOR EARTH AND STONE FENCES**.—Kevin R. Bond, Cambridge, Mass.
244,853. **WATER-CLOSET**.—Samuel S. Hellyer, Newcastle Street, Strand, County of Middlesex, England.
244,907. **APPARATUS FOR PURIFYING SEWERS, ETC.**.—F. E. Lippincott, Atlantic City, N. J.
244,921. **LATCH**.—Michael J. Mullins, New York, N. Y.
244,925. **LATHE FOR TURNING IRREGULAR FORMS**.—Geo. H. Ober, Chagrin Falls, O.
244,928. **SHINGLE-JOINTING MACHINE**.—Willis J. Perkins, Grand Rapids, Mich.
244,949. **WOOD-TURNING MACHINE**.—Henry R. Sillman, Brooklyn, N. Y.
244,952. **SEAL-TRAP**.—Orlando W. Spratt, Philadelphia, Pa.
244,953. **DOOR-SECURE**.—Joshua W. Trussell, Rockland, Me.
244,955. **EAVES-THROUGH HANGER**.—George M. Vedder, Elk Run, Pa.
244,957. **APPARATUS FOR SUPPLYING DISTRICTS IN CHURCH AND TOWNS WITH HEAT AND POWER**.—Birdall Holly, Lockport, N. Y.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—Twenty-one building permits have been issued since the last report, the following only being of sufficient importance to be mentioned:
Henry Smith, three-story brick building, n w cor. Marion St. and Jay Alley.
The McKim estate, 22 four-story brick and stone dwellings, on Calvert St., between Chase & Eager Sts. Mt. Calvary Church, extend present building, cor. Euter and Madison Sts.
J. Fred. Albrecht, three-story brick building, n w cor. McHenry St. and Goldsmith Alley.
Geo. Doherty, extend and improvement to building, 105 Dallas St.
Thos. J. Myer & Co., extend four-story brick warehouse, 50 West Falls Ave., between Easton and Canton Aves.
Cath. Frisby, two-story brick building, east side of Broadway, between Canton and Eastern Aves.
Geo. Dunneek, two-story brick building, No. 44 Exeter St., between Pratt and Still Sts.
Wm. King, extend present building, cor. Leadenhall and Jephson Sts.
CLUB-HOUSE.—The Merchants' Club of this city have invited plans and specifications for a new club building, to be erected on a lot 49' 3" front on Germania St. by 80' 4" deep, to have two full stories above the basement and kitchen above all.
CHAPEL.—The P. E. Mission of the Chapel of the Atonement is about to erect a new chapel on a lot on the s w cor. of John and Chester Sts., with a front of 60' on John St. and depth of 120' on Chester St., the building will be of brick with stone finish, and have belfry and stained glass windows.
MESSESS.—The premises 82 West Baltimore St. have been leased by Messrs. Herzog & Co., who will tear down the present building and erect a new building especially designed for the purpose of a museum; the building will be three stories high and 100' deep, 20' front, of brick.

Boston.

BUILDING PERMITS.—**Wood**.—Clarendon Ave., near Metropolitan Ave., for C. Thomeless, dwell., 22' x 28'.
Saratoga St., rear of, near Riverside Ave., for Eli W. Hoyt, coal-house, 20' x 40', Chas. H. Brown, builder.
Parkman St., near Dorchester Ave., for A. W. Fice, two-story dwell., 21' x 30'; Chas. Stinson & Co., builders.
Edgewood St., near Blue Hill Ave., for Chas. E. Currier, two-story dwell., 21' x 32'; Chas. E. Currier, builder.
Brick.—Pleasant St., No. 63, for L. P. Bartlett, three-story dwell. and store, 20' x 72'; L. P. Bartlett, builder.

Brighton Ave., near Beacon St., for Reub. Dow, boiler house, 21' x 10'; Moses Burles, builder.
Durham St., near St. Botolph St., for Ivory Bean, 9 three-story dwell., 20' x 40'; Ivory Bean, builder.
9 three-story dwell., ditto, St. Botolph St., between West Newton and Durham Sts.
9 three-story dwell., ditto, West Newton St. near Durham St.
Horse.—Mr. D. H. Lane is to build on his land, No. 291 Beacon St., a brick and stone dwell., 24' x 68'; to cost \$25,000; S. J. P. Thayer, Boston, architect.

Brooklyn.

BUILDING PERMITS.—**Forces St.**, No. 257, three-story frame tenement; cost, \$4,000; owner, Henry Kulep; architect, Theo. J. Bell.
Myrtle St., No. 57, n s, 50' e Charles Pl., three-story frame tenement; cost, \$3,000; owner, Geo. Krebs, 55 Myrtle St.; architect, Geo. Hillebrand, builders, Geo. Herlein and Geo. Krebs.
Washington Ave., w s, near Park Ave., 2 three-story brick dwell.; owners, Mrs. Fisher Howe and Peter Metelick, 128 Willow St.; architect, Francis Raymond; builders, John F. Anderson and Wm. Ovington.
Sumpter St., s s, 275' w Ralph Ave., two-story brick wagon manufacturing; cost, \$3,000; owner, Henry Wend, 69 Sumpter St.
Lafayette Ave., n s, 60' e Mary Ave., 2 three-story brownstone dwell.; cost, each about \$6,500; owners and builders, H. & E. W. Phillips, 109 Kosciuszko St.; architect, E. W. Phillips.
Yates Ave., w s, 20' n Lexington Ave., 4 three-story brownstone dwell.; cost, each, \$4,500; owner, J. J. Quinn, 463 Mason St.; architect, Isaac D. Reynolds; builder, M. J. Reynolds.
Gates Ave., s s, 25' e Lewis Ave., 4 three-story brownstone flats; cost, each, \$5,000; builder, Chas. G. Hall, 63 Patchen Ave.
Leonard St., No. 571, three-story frame tenement; cost, \$3,575; owner and architect, John Miller; builder, Thos. F. Donohue.
Burter St., n s, about 200' w Vanderbilt Ave., three-story brick and stone house for destitute children; cost, \$35,000; owner, the Industrial School Association, etc.; architects, Parfitt Bros.; builders, Owen Nolan and Martin Lee.
ALTERATIONS.—**Park Pl.**, n w cor. Vanderbilt Ave., one-story brick extensions; cost, \$5,000; owner, Wright Duryea, on premises; architect, Joseph Platt; masons, John Demott & Son.
Parson St., near Wall St., Ferry, known as Nos. 4 and 5 of Pierpont's stores, repair damage by fire; cost, \$27,700; owner, Henry E. Pierpont, on premises; architect and builder, Henry Wallace.
Court St., s e cor. Second Pl., repair damage by fire; cost, \$4,700; owner, E. C. Donnellon, President St., near Clinton St.; builder, Eli Osborn.

Buffalo.

HOUSE.—Frame dwell., Linwood Ave.; owner, Jas. Adams; architects, Porter & Percival; cost, \$10,000.
CHURCH.—Brick church for the Free-Will Baptist congregation; cost, about \$20,000; builder, H. Schaefer; architects, Porter & Percival.

Chicago.

BUILDING PERMITS.—**J. LAWSON**, two-story brick dwell., 20' x 60', 240 Henry St.; cost, \$4,000.
F. Jansen, one-story brick dwell., 20' x 40', 736 Thirty-first St.; cost, \$2,000.
P. J. Sexton, five-story brick stores, 38' 6" x 162', Michigan Ave. and Madison St.; cost, \$40,000.
A. J. Baxter, two-story brick barn, 24' x 66', Aberdeen and Monroe Sts.; cost, \$3,200.
W. H. Hoyt, six-story brick warehouse, 80' x 80', Michigan and Pine Sts.
L. Hodges, three-story brick barn, 50' x 170', 2129 Indiana Ave.; cost, \$15,000.
D. H. Dunton, three-story brick store and dwell., 28' 8" x 60', 559 Wabash Ave.; cost, \$5,500.
H. C. Kriete, three-story brick dwell., 22' x 67', 407 Sedgwick St.; cost, \$6,000.
C. Wohlender, two-story brick dwell., 20' x 30', 170 Brown St.; cost, \$2,700.
B. F. Murphy, two-story brick dwell., 31' x 75', Michigan Ave. and Twenty-ninth St.; cost, \$15,000.
Frederick Weidman, two-story brick dwell., 23' x 30', 621 Hurbit St.; cost, \$3,000.
A. Olson, 3 two-story brick dwells., 60' x 55', 839 North Clark St.; cost, \$6,000.
A. Olson, 4 two-story brick dwells., 80' x 58', 827 North Clark St.; cost, \$6,000.
J. R. Dixon, one-story brick dwell., 20' x 30', 1086 Hinman St.; cost, \$7,000.
F. Hrodig, two-story brick dwell., 21' x 58', 110 Ewing St.; cost, \$3,800.
C. Grim, two-story brick dwell., 21' x 56', Throop St., near Nineteenth St.; cost, \$3,800.
M. Sonan, three-story brick store and dwell., 24' 6" x 100', Centre Ave. and Nineteenth St.; cost, \$7,500.
A. Brodie, two-story brick store and dwell., 22' x 45', 250 Townsend St.; cost, \$3,000.
A. Muller, two-story brick store and dwell., 21' x 60', 238 Forquer St.; cost, \$4,000.
F. Rapp, two-story brick dwell., 28' x 57', 38 Fowler St.; cost, \$4,000.
P. Wallinhat, two-story brick dwell., 23' 6" x 60', 203 Henry St.; cost, \$4,000.
Vanderkloot & Son, brick foundry, 55' x 88', Halsted and Twenty-sixth Sts.; cost, \$6,000.
W. E. Rollo, two-story brick dwell., 20' x 60', 607 Washington St.; cost, \$6,000.
F. L. Beckwith, two-story brick dwell., 20' x 60', 241 Park Ave.; cost, \$6,000.
R. Hickox, two-story brick dwell., 48' x 50', Loomis and Van Buren Sts.; cost, \$18,000.
A. Dill, two-story brick store, 22' x 70', Hinman and Lincoln Sts.; cost, \$5,000.
J. R. Carmack, two-story brick dwell., 20' x 35, 462 Orchard St.; cost, \$3,500.
M. Stende, 6 two-story brick dwells., 123' x 33', 275 Twenty-fourth St.; cost, \$7,500.
C. N. Wagner, two-story brick dwell., 22' x 56', 890 Blue Island Ave.; cost, \$3,500.
G. Wing, three-story brick dwell., 24' 0" x 54, 621 Larabee St.; cost, \$5,500.
S. Shackford, three-story brick dwell., 20' x 43', 248 North La Salle St.; cost, \$5,000.

C. Harpel, three-story brick dwell., 25' x 62', 390 Oak St.; cost, \$5,500.

Cleveland.

BLOCKS.—**J. B. Perkins** is building several blocks on Seneca, Superior and Franklin Sts.; total cost, about \$150,000; Coburn & Harman, architects for block on Seneca St., Joseph Ireland, architect for blocks on Superior and Franklin Sts.
R. C. Parsons is building a brick block on Superior St.; S. C. Kuhn, builder.

ACID-WORKS.—Marsh & Harwood are building extensive additions to their acid-works; J. M. Blackburn, architect; J. F. Watterson, carpenter; Jno. Gill, mason.

OFFICE-BUILDING.—**L. S. & M. S. R'y** office-building on the corner of St. Clair and Seneca Sts. is being pushed forward; S. C. Kuhn, contractor; Jos. Ireland, architect.

POST-OFFICE.—The Post-Office building is being hurried along; Mr. Linn, contractor; cost, \$150,000.

Denver, Col.

BUILDING PERMITS.—**William Lessig**, two-story brick business house, 42' x 60', cor. Sixteenth and California Sts.; cost, \$7,000.

J. S. Brown, two-story brick building, 25' x 40', Stout St.; cost, \$2,600.

D. C. Dodge and C. E. Hill, two-story brick dwell., Lincoln Ave.; cost, \$7,500.

Edward Connell, two-story brick dwell., Champa St.; cost, \$5,000.

Alonso Ilce, brick building on Eleventh St.; cost, \$4,000.

R. A. Cammeron, alteration to brick dwell. on Broadway; cost, \$3,000.

C. M. Parker, two-story brick dwell.; cost, \$3,000.

Dr. Hamer, two-story brick cottages, Stout St.; cost, \$5,250.

John Shevlin, three-story brick block, Arapahoe St.; cost, \$9,000.

D. Clifford, two-story brick block; cost, \$6,000; Emmett Anthony, architect.

S. N. Alexander, 6 two-story brick dwells., Thirty-second St.; cost, \$16,000.

NATATORIUM.—The Denver Natatorium Association, one-story brick building, 124' x 60', Larimer St.; John Pearce, architect; cost, \$8,600.

CHURCH.—The Second Congregational Church, one-story frame building, 35' x 60', Arapahoe St.; cost, \$4,000.

MALT-HOUSE.—Geo. Oppenlander, three-story malt-house; cost, \$5,000.

New York.

BUILDING PERMITS.—**Madison Ave.**, n w cor. Fifty-second St., nine-story brick apartment-house, offices in basement; cost, \$1,750,000; owner, Berkshire Association, 64 and 66 Worth St.; architect, C. Pfeiffer.

Madison Ave., s e cor. Fifty-third St., five-story brick apartment-house; cost, \$40,000; owner, Kate W. Ambrose, 615 Lexington Ave.; architect, Carl Pfeiffer.

East Tenth St., No. 3, two-story brick stable; cost, \$7,500; owner, George W. Miller, 39 Fifth Ave.; builder, J. J. Tucker.

Tenth Ave., s s, 25' 1" s Sixty-seventh St., 2 four-story brick tenements; cost, each, \$10,000; owner, Geo. A. Treacy, 1716 Madison Ave.; architect, A. Glaserapp.

Twelfth St., Nos. 712 to 718, 4 four-story brick tenements; cost, each, \$10,000; owner and builder, John McGarry, 583 Monroe St., Brooklyn; architect, T. S. Godwin.

One Hundred and Sixth St., n s, 210' e Third Ave., 4 four-story brick flats; cost, each, \$12,000; owner, Lottie N. Dean, Second Ave., Cor. Hundred and Twenty-first St.; architects, Atkinson & Rosenstock; builder, H. N. Dean.

Fifth Ave., s w cor. One Hundred and Twenty-fifth St., 6 four-story brownstone dwells.; cost, each, \$11,000; owner, H. M. Edmundstone, 61 Palaski St., Brooklyn; architect, Jas. E. Ware.

One Hundred and Twenty-fifth St., s s, 85' w Fifth Ave., 6 four-story brownstone dwells.; cost, each, \$11,000; owner and architect, same as last.

Madison Ave., n w cor. Sixty-eighth St., four-story stone and brick dwell.; cost, \$125,000; owner, H. G. Marquand, 21 West Twentieth St.; architect, H. M. Hunt; builders, T. T. O'Brien & Son.

One Hundred and Nineteenth St., n s, 375' w First Ave., 8 four-story brownstone tenements; cost, each \$12,000; owner, S. C. Hinman, 43 West One Hundred and Thirty-first St.; architect, J. Roger; builder, not selected.

Eighty-third St., n s, 150' e Fifth Ave., 2 three-story brick dwells.; cost, each, \$40,000; owners, Harriet M. Arnold and F. A. Constable, 240 Madison Ave.; architect, W. Schickel; builders, Jas. Webb & Son.

East Fifty-fifth St., Nos. 142 and 144, 2 two-story brick stables; cost, each, \$7,000; owner and architect, Wm. B. Baldwin, 119 East Fifty-seventh St.; builders, Kennedy & Totten.

One Hundred and Twenty-seventh St., n s, 125' w Seventh Ave., 2 three-story brownstone dwells.; cost, each, \$8,000; owner, A. Teets, 308 West One Hundred and Twenty-fifth St.; architect, W. W. Gardiner; builder, Philip Teets.

Eastern Boulevard, s w cor. Seventy-first St., six-story main factory, boiler-house and stable; cost, entire, \$65,000; owners, Messrs. Leissner & Louis, 828 Broadway; architect, A. Wagner.

One Hundred and Fifteenth St., Nos. 319 and 321, 2 four-story brick tenements; cost, each, \$8,000; owner, August Wolf & Co., 16 Ave. B.; architect, Chas. Burkskober; builders, Wolf & Loehman.

Vanderbilt Ave., n w cor. Forty-fourth St., three-story brick office-building; cost, \$8,000; owner, New York Central Railroad Co.; builder, J. Richardson.

East Thirty-eighth St., No. 226, three-story brick school; cost, \$28,000; owner, Mayor, etc., New York; architect, D. J. Stagg; builder, Edward Gustavson.

One Hundred and Twenty-seventh St., n s, 375' w Seventh Ave., 3 four-story brick and brownstone dwells.; cost, \$8,000; owner, Louisa Niebuhr, 2124 Second Ave.; architect, W. S. West; builders, W. F. & W. H. Niebuhr.

Sixth Ave., No. 263, five-story brick store; cost, \$25,000.

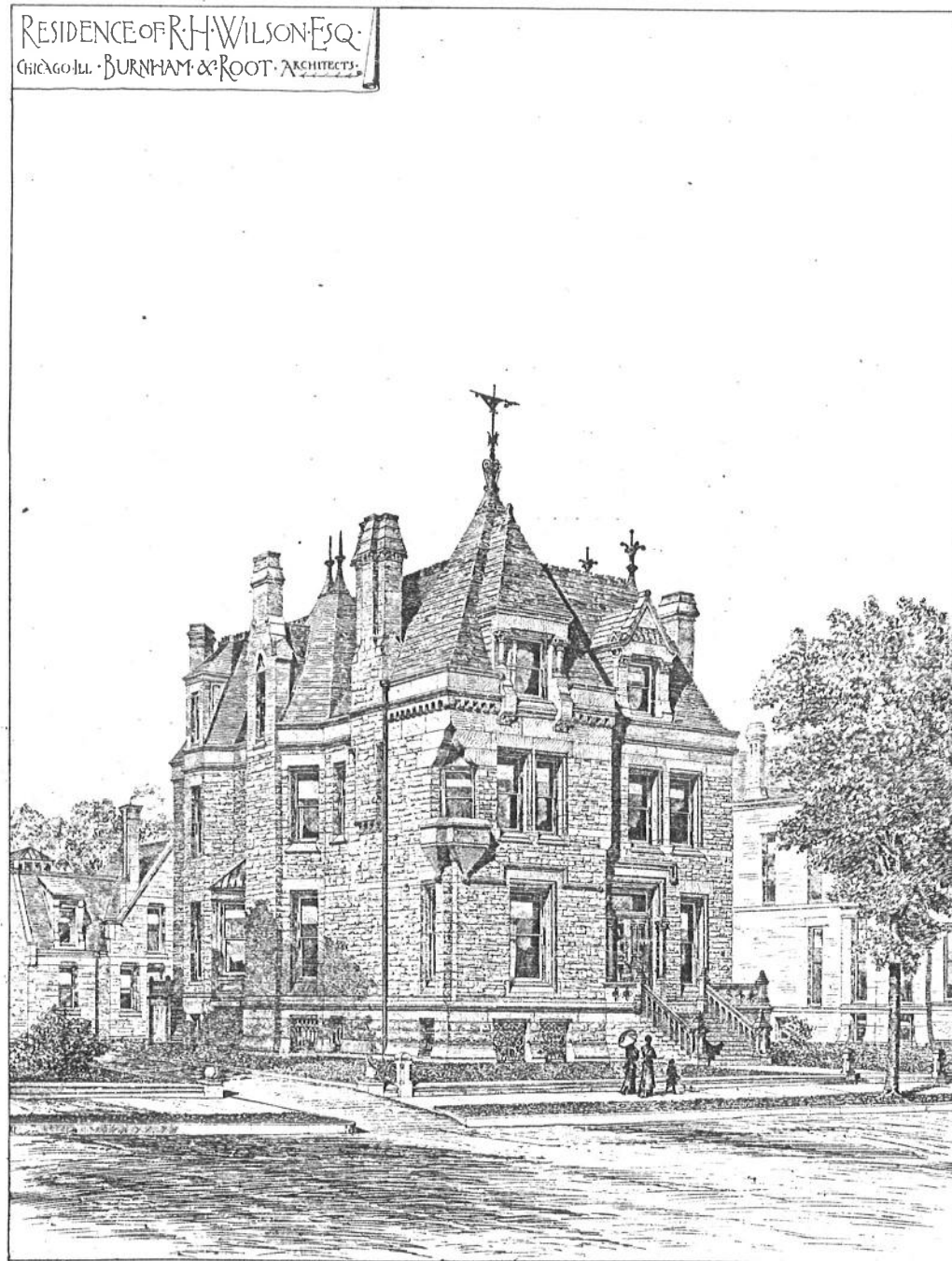
(Continued on next page.)

SUMMARY:—

The Proposed Changes in
New Competition for the
The Proposed New York
Distance "Telephoning."
A "Singular" Accident in
England, and its Architect
COLONIAL ARCHITECTURE.—
FOURTHY IN THE UNITED STATES
THE ILLUSTRATIONS:—
House at Chicago, Ill.—
tate at Babylon, L. I.—
Saint Sang, Bruges, Belgium
THE NEW ROMAN SEWER.
UPSTAIRS IN WESTMINSTER
MEETINGS OF THE TRUSTEES
COMMUNICATION:—
The Stanchions of "Ballou"
NOTES AND CLIPPINGS.

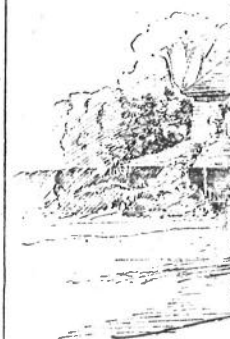
THE official engineers of
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RESIDENCE OF R. H. WILSON ESQ.
CHICAGO, ILL. BURNHAM & ROOT, ARCHITECTS.



The McAlister Press of G. W. Brown & Co., Boston.

Leaves from a Sketch Book.



L. Howard.

Published by G. W. Brown & Co., Boston.

Aug 13, 1881

seller Gustavus Wex,¹ overseer of the works of improvement in the Danube, at Vienna. These memoirs are not only of interest from the facts that they embody, but also for their citations to other works, making them in some degree a bibliography of the subject. They have been referred to commissions appointed by various academies of science, and the conclusions that they present have been approved by the highest authorities. They in fact confirm, by numerical statements, the observations of every one who has had an opportunity to notice the amount of water flowing in streams before and after the clearing of the district in which they rise, and through which they run. This amount affects the interests concerned in the hydraulic power of the larger streams, the supply of water to cities, and the navigation of rivers and canals.

As this diminution of water-supply is the result of man's acts, so also in a great degree is the remedy of control within his power, and by means of planting, and with reservoirs he can often recover and maintain the advantages lost, perhaps as fully as they existed under the primeval forests. . . .

Returning to the original resolution under which the Committee upon Forestry was appointed by this Association, in 1873, there remains to be considered one subject that claims our careful consideration.

With the exception of a communication from its chairman to the New York Legislature,² and one of like import by Col. Whittlesey, another member, to the Ohio Legislature, no action has thus far been taken by this committee towards bringing the subject to the attention of our State legislatures. This delay has in part arisen from an uncertainty as to how far a State Government may, with any prospect of success, enact laws tending to secure efficient planting upon private lands. . . .

THE ILLUSTRATIONS.

HOUSE OF R. H. WILSON, ESQ., CHICAGO, ILL. MESSRS. BURNHAM & ROOT, ARCHITECTS, CHICAGO, ILL.

This house is built throughout of buff and blue Bedford limestone, laid in random courses and roughly dressed. The interior finish is of natural woods. The house is heated by steam, warmed air being passed into air-spaces formed in the depth of floor joists, and thence into the room. With this process it is found that the temperature of the floor is in all cases ten degrees higher than at a point five feet above the floor.

DESIGN FOR A COUNTRY HOUSE, BY MR. C. H. WALKER, NEW YORK, N. Y.

This design was placed second in the fourth competition held by the Architectural League of New York.

LEAVES FROM A SKETCH-BOOK, BY G. R. TOLMAN, ARCHITECT, BOSTON, MASS.

LE SAINT SANG DE BRUGES, BELGIUM.

This plate is copied from the *Moniteur des Architectes*.

THE NEW ROMAN SEWERS.

AFTER all that has been written concerning the unpleasant odors of Paris, which for more than a year have properly engaged the attention of its inhabitants and its municipal authorities, I have thought it worth while to investigate what is going on in Rome, of which the pollution is proverbial, but which is to-day making great sanitary advances.

It is very regrettable, of course, to see still, in the centre of the city, certain places liable to receive in broad daylight deposits most offensive to the sense of smell, and most revolting to the eyesight, of the passer-by. After all the efforts of the police to correct the disgusting habits of the people, who convert the vestibules, as well as the porticos and staircases of the palaces into public privies, had proved vain, the authorities have established numerous public urinals; but this is not enough; it is the private sense of decency, and the efforts of the public prints, great and small, which must be looked to to-day to aid the police in teaching the conventionalities which are incumbent on all civilized peoples, especially on those who like the Italians receive yearly thousands of foreign tourists who leave behind them large sums of money.

Let us admit that these special improprieties give rise to only local infection, and let us seek the causes of the all-pervading odors, since there is near the city no manufactory of fertilizers or large deposit of it, and the sewers only emit occasional discharges of noisome gases.

The arrangement of the existing sewers in Rome, introduced by Signor Vescovali, an engineer of great merit and experience, is new: the experience of the last five years has proved their good qualities, and in many cases it is probable that they could be adopted elsewhere to advantage.

Before explaining the construction of these sewers, let us recall the system of the works which supply Rome with water, and rectify an error which obtains general credence in despite of the remarkable work of Belgrand on Roman aqueducts.

Rome is supplied with water as is no other city in the world.

¹ Ueber die Wassernahme in den Quellen, Flüssen und Strömen, bei gleichzeitiger Steigerung der Hochwasser in den Culturländern, von Gustavus Wex, K. K. Ministerialrath und Oberleutnant der Donauverwaltung bei Wien. 4to, pp. 43, with 7 plates.

² Zweite Abhandlung, etc., 4to, pp. 39, with 6 plates.

There are separate imprints from the *Zeitschrift des österreichischen Ingenieur- und Architekten-Vereins*, 1873 and 1879.

³ Senate Document, 52, 1875.

Those which are fairly provided allow to each inhabitant a daily average of 200 or 300 litres, while most allow less than 100 litres per diem to each consumer. The authors who have written on Rome state that the daily supply of water in that city amounts to 1,100 litres per capita. Granting that this used to be so, we must nevertheless state that for a long time past the supply, taking the average of dry and wet years, has been but about 500 litres for each of the 270,000 inhabitants: this does not, it is true, take into consideration the numerous wells and certain springs which feed some small fountains. This amount of water ought to be more than sufficient to make Rome the cleanest of cities.

The works now in process of construction will before long furnish at least 1,000 litres a day to each inhabitant, — but we shall discover that the mode of reckoning the consumption per capita is in this case absolutely false.

In the first place it must be remembered that the general level of most of the streets has, like the bed of the Tiber in its course through the city, been raised fifteen to eighteen feet; that formerly water was brought by lofty aqueducts, and distributed everywhere through the buildings and in the streets, so as to cleanse them thoroughly and wash into the sewers filth of every kind; and then it is necessary to recall the fact that to-day the water only reaches the level of the ground, and hardly that, and that a beginning has but just been made to make use of it for the sanitary improvement of the city by sprinkling and washing the streets.

During the last few years a new water company has furnished water to the upper stories of buildings in the new quarters. A reservoir is building, but as yet there is no water for street service.

Of the 600,000 cubic metres of water which daily enter Rome, almost all of it belongs to the owners of palaces and houses where it flows, often in the cellars or a little higher up in the court-yards, only to waste itself directly into the sewers, without being of any service to the sanitation of the city or of the neighboring buildings. Amongst these palaces there are some which are supplied with 1,200, 1,000, and even 2,500 cubic metres a day.

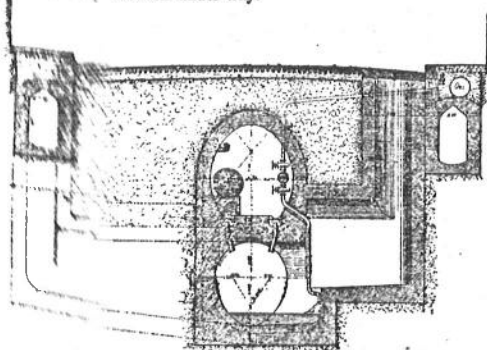
There is no doubt that the municipal government will have recourse to confiscation of these water-privileges when the necessary arrangements which will allow of this abundance being used for watering the streets during the dry season shall have been finished.

In the present condition of things, what happens is this: the joints in the pavements are impregnated with the filth of all kinds that is thrown on them, and exhale the odors of a thousand stables, the intensity of which is increased by a rain, in consequence of the fermentation which it induces. It is probably for the sake of getting rid of this smell, that it is the custom at Rome for the richer families to inhabit the second and third stories, instead of the first as in other cities.

The reputation of the ancient Roman aqueducts has led to their being imitated, as well at Paris as elsewhere; but Belgrand says, and with justice, that what was well enough in the days of Augustus is absurd to-day. So the present authorities have ordered out a career of progress, but not as yet with sufficient vigor.

The greater part of the old sewers of ancient Rome are no longer serviceable, whether because of their unknown labyrinths, their ruinous condition, — a consequence of their having been built without reference to one another, sewers of two metres' diameter branching into those 0.70 metres in diameter, — or because of their depth below the surface, being as they are far below the present low-water mark of the Tiber.

These ancient sewers receive vast masses of foul water, which is discharged and absorbed as the case may be, but whose solid contents are deposited, and form vast cesspools from which arise miasms at certain periods, and unite at the surface of the ground with the odors which have been mentioned above. This condition of things will end only when the new system of sewers shall be finished; fortunately they are well under way.



Since every reason induced the engineer to carry the invert (radier) to the lower level, he has found it most economical and desirable for the narrow streets to divide his sewer as is shown in the cut.

In the lower sewer flow the kitchen garbage alone is excluded every morning as in Paris. A drainage is adopted as shown, in lowering the level of the ground, kitchen-waste and rain-water are under the sidewalk, which discharges directly the drainage of waters. October, before the rains, shows the sewers, thanks to the volume which overwhelms as far as possible as it enters.

It would evidently be a disadvantage, and to cause a sufficient waste-pipes which descend from the mains, etc., and of which the lower connect the upper and lower sewer-main so that both sewers.

Personal inspection enables the volume of the water flowing in the city are not due to the matter discharged from the foul that the foul odors are due only independent of the question of almost every day.

When one knows the men of the City have placed at the head of their schools, one is convinced that these distinguished men investigations wherever it may, in their own work where, will make it possible models at Rome. It is certain twice rejuvenated — once by the renaissance of art and literature, science, particularly economic principle. How many noble architects and engineers who will only mention a few of the

The preparation of geological maps; the search for the not only of the mercantile lives of the workmen (every one who have cut the great tunnel these workmen is not so well distribution of water; the but the city from the overflowing hydraulic power which will set up their works within the conditions; the construction of metres long; the building of ing; the building of the House

All this proves that Italy is a land of conspirators, l'azzurro haunt of the muses, artists becoming the abode of labor, reputation, seem to be changing are showing signs of life; serious, has begun to circulate, for labor alone can lead to success.

UPSTAIRS IN V

We are so accustomed to of most English abbeys except we mean "church" in a great of the conventual buildings of extraordinary in going upstairs chamber. But such ups and visitor as somewhat strange. knowing, that there are in some ground floor, that above some miniature churches in themselves monuments. None of these can be impossible to show them to. The stairs are not only narrow and when you reach at length irregular surface on the top prevent you from falling into together worth the trouble it always care to get behind the the seamy side of what they and order. The most lovely ly parts, and Westminster A strange thing about visiting ing the antiquity, the historic heap of dusty rubbish which centuries. Here, a bundle of opy of some great king's tomb a greater. There, a heap of

BUILDING INTELLIGENCE.

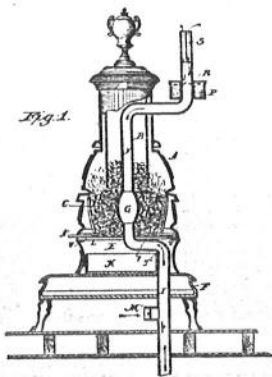
(Reported for The American Architect and Building News.)

[A large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

243,548. HOT-AIR STOVE.—Egbert C. Goodrich, Poulton, Mich., and John W. Johnson, Moravia, N. Y. This invention has for its objects, to provide means whereby a continuous current of thoroughly heated and moistened air may be supplied to the rooms above the one in which the stove is, and to provide for renewing the parts of the apparatus when injured by the intense heat of the fire. The letter A indicates a "magazine stove." B indicates the magazine, C the fire-pot, E the ash-pit, and F the base of the stove. The letter G indicates a heating chamber, consisting of a shell of cast-iron, which is elliptical in vertical section, and which is provided with cylindrical extensions H at opposite ends. I indicates a pipe extending upward through the back part of the stove into the ash-pit, where it is bent forward to the centre of the stove, above the removable ash-box K, and then vertically upward, extending through the centre of



the grate L, which has an opening for the purpose. This pipe terminates just above the grate, and to it is detachably secured the heating-chamber G, in such position that it will be in the hottest part of the fire-pot, where it will be always surrounded by incandescent fuel. The lower end of the pipe I is connected to the side of the room, and communicates with the external air. The pipe may be provided with a branch, provided with a suitable damper, M, leading into the room, by means of which air may be taken from the room directly, instead of from the outside. The letter N indicates a pipe detachably secured to the upper end of the chamber G, and extending vertically up into the magazine to near the top, where it is bent into the horizontally and passed through the walls of the stove, and then upward to the rooms above. The letter P indicates an annular water-chamber surrounding the pipe N above its second bend, and communicating with the interior of said pipe by means of apertures, R, to supply steam to the heated air, in order to moisten it. The letter S indicates a series of radial partitions in the upper part of the pipe N, for distributing the heated air in different directions, as indicated by the arrows.

244,968. WINDMILL.—John S. Adams, Elgin, Ill.
244,969. WINDMILL STEERING MECHANISM.—J. S. Adams, Elgin, Ill.
244,968. COMPOUND FOR SEWER-PIPES, ETC.—Daniel H. Dorsett, Clinton, Io.
244,968. ROTARY FAN-BLOWER.—Charles Gage, Boston, Mass.
244,964. MACHINE FOR GRINDING CEMENT.—Benjamin F. Holland, Utica, Ill.
245,011. TRAP FOR WASH-BASINS.—Andrew W. Nicholson, Brooklyn, N. Y.
245,016. COCK AND FAUCET.—Fergus A. Renton, Green Point, N. Y.
245,019. COMBINED SHUTTER-WORKER AND SAFETY-FAUCET.—Nelson Rowen and Martin D. Miller, Oswego, Kan.
245,023. EXPANDING REAMER.—Benjamin F. Sisco, Minneapolis, Minn.
245,024. REACTING TRUSS.—Hector von Bayer, Washington, D. C.
245,067. RIVET-SKT.—Andrew F. Clinch, York, and James H. Clinch, Philadelphia, Pa.
245,061. ELEVATOR.—Richard T. Crane, Chicago, Ill.
245,076. SAW-TABLE GAUGE.—Edgar A. Jones, Sturgis, Mich.
245,078. CHIMNEY AND COWL.—John H. Kohlmeier, Norwalk, O.
245,082. DOOR-CHECK.—William W. Massey, Elyria, O.
245,090. SAW.—Geo. H. Northway, Chicago, Ill.
245,093. ONE-HAND PLANE.—Isaac Reeder, Philadelphia, Pa.
245,096. ADJUSTABLE MANTELPIECE.—Thomas Scanlin, Evansville, Ind.

245,106. BORING-BIT.—M. Scott Weller, Jefferson County, W. Va.
245,114. SAW.—Joseph Ashenfelter, Blue Springs, Neb.
245,122. COMBINATION-TOOL.—George W. Bishop, Sterling Township, O.
245,122. SELF-CLOSING FAUCET.—Clara E. Carr and George D. Scott, New York, N. Y.
245,139. ELECTRIC LIGHT-METER REGISTER.—George Cressey, Louisville, Ky.
245,140. SEWER-TRAP.—Abraham Cummings, Philadelphia, Pa.
245,156. WINDOW-FRAME.—William Goforth and Andrew J. Goforth, Windsor, Mo.
245,158. HEATING-FURNACE.—Albert L. Goodenow and William J. Owens, Utica, N. Y.
245,193. WATER-CLOSET.—John McGuire, Milwaukee, Wis.
245,196. WATER-CLOSET.—Henry C. Meyer, New York, N. Y.
245,198. SASH-FASTENER.—John D. Miller, Lancaster, O.
245,213. SEAL-TRAP.—Dennis A. Ragan, Philadelphia, Pa.
245,227. CLAY TILE.—Fritz Schmidt and Martin Holzhecher, Uppeln, Prussia, Germany.
245,230. DOOR AND WINDOW SECURER.—Wm. Secuman, Honesdale, Pa.
245,237. PLASTERING AND ORNAMENTING WALLS AND CEILINGS.—David W. Stockstill and Thomas J. McGee, Washington, D. C.
245,238. APPARATUS FOR EMITTING WATER-PIPER.—James Thomas, Newark, N. J.
245,242. CHANDLER.—Charles F. Spencer, Rochester, N. Y.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—Eighteen building permits have been issued since the last report, the following only being of sufficient importance to be mentioned: A. H. Schaylowsky, 6 three-story brick buildings on Boston St., near Guy St.
S. W. Hunter, two-story brick buildings on Greenmount Ave., between Monument and Madison Sts.
W. S. Fietzsch, three-story brick buildings, on Franklin St., between Paca St. and Pennsylvania Ave.
Geo. A. Frames, three-story brick building, n e cor. Monument and Gay Sts.
Geo. A. Sargeant, 8 two-story brick, on Claret Alley, between West and Stockholm Sts.
Wm. E. Hooper, addition and improvement to dwell., n e cor. Madison Ave. and Townsend St.
Thomas A. Gorman, 5 two-story brick buildings on Chesapeake St., near Hudson St.
Lewis A. Kuzer, four-story brick warehouse, n side Holliday St., near Lexington St.
Isaac Hartman, three-story brick building on Baltimore St., between Gay and Holliday Sts.
R. P. Guy, three-story brick building, s w cor. Lexington and Park Sts.
WAREHOUSE.—Mr. Chas. E. Cassell is preparing drawings for a new warehouse, for the Trustees of the Thomas Wilson Sanitarium, to be built on west side of Hanover St., between Pratt and Lombard Sts., 29' 1" front, 140' deep, five stories and basement, of pressed brick with red sandstone finish; cost, about \$25,000.
OFFICE-BUILDING.—The contract for the erection of a new building for the central station of the Brush Electric Light Company, at No. 40 Monument St., has been awarded to John Waters, for \$10,200, the building to be 216' long, 16' wide, one-story high (21'); the contract for building a stack for same, 100' high, 7' clear inside, has been awarded to Jno. G. Robinson, for \$4,200.

Boston.

BUILDING PERMITS.—Brick.—Terrace St., near Park St. Pl., for James W. Kenney, four-story brewery, 80' x 45'; James Devine, builder.
Beacon St., No. 281 and 289, for Vinal & Dodge, 2 three-story dwells., 24' x 68', mansard; Vinal & Dodge, builders.
Harwich St., near Dartmouth St., for John L. Lamprey, 8 dwells., 20' x 35'; Thomas R. White, builder.
Harwich St., near Yarmouth St., for John F. Mead, 11 dwells., 20' x 35'; Thomas R. White, builder.
Dale St., near Mills St., for O. H. Flanders, 3 dwells., 18' 6" x 36', dwell., 21' x 36', three-story dwell., 22' x 36'.
Bunker Hill St., Sullivan and Wall Sts., for Middelex R. R. Co., three-story stable, 76' x 78'; M. S. & G. N. Miller, builder.
Asterbury St., near Clarendon St., for J. Avery Richards, four-story dwell., 24' x 62'; Chas. Chipman, builder.
West Broadway, near A St., for J. J. Williams, boiler-house, 25' x 18'; Vinal & Dodge, builders.
Wood.—Parkman St., near Dorchester Ave., for A. W. Fice, two-story dwell., 21' x 30'; Chas. Stinson & Co., builders.
Edgewood St., near Blue Hill Ave., for C. E. Currier, 2 dwells., 21' x 32'; C. E. Currier, builder.
Terrace St., rear of, near Parker Pl., James W. Kenney, cooper shop, 50' x 20'.
Soley St., No. 18, for Elizabeth Wiley, three-story dwell., 16' 6" x 34'; Geo. M. Starbird, builder.
Dudley St., No. 124, for Donald Kennedy, store, 17' x 30'; Hugh W. Brown, builder.
Unnamed St., off Dorchester Ave., for Wm. Stetser, dwell., 21' x 23'; Wm. Eadie, builder.
Bolton St., 121 and 123, for Edw. A. Kenney, 2 three-story dwells., 22' x 30'.
Edgewood St., near Washington St., for David N. McKenney, storage, 35' x 25'; James Currie, builder.
Beacon St., near Brookline Ave., for James McGarry, two-story dwell., 21' x 60'; James Campbell, builder.
Longwood Ave., No. 117, for Mary Lane, three-story dwell., 24' x 32'.

Orleans St., cor. Webster, for Luther Hall & Co., two-story stable, 22' x 21'; Jos. A. Brown, builder.

Brooklyn.

BUILDING PERMITS.—Eighth Ave., s w cor. Union St., three-story brick dwell.; cost, \$58,000; owner, Mrs. M. L. Maxwell, 71 First Pl.; architect, R. B. Eastman; builders, W. H. Hazzard & Son.
Manter St., No. 40, s s, near Lorimer St., three-story frame tenement; cost, \$3,300; owner, Mr. Williams, on premises; builders, G. Welch and J. Bugger.
Penn St., n s, 229' w Marcy Ave., 3 two and one-half-story brownstone dwells.; cost, \$4,000; owner, S. B. Saddington, 263 Hewes St.; architect, G. M. Casey; builder, W. H. Colson.
Stuyvesant Ave., s s, 60' s Gates Ave., 2 three-story brick tenements; cost, total, \$7,000; owner, J. T. Perry, 1001 De Kalb Ave.; builders, A. Sachs and J. T. Perry.
Lafayette Ave., s s, 415' e Bedford Ave., 2 two and one-half-story dwells.; cost, \$4,000; owner and carpenter, Geo. F. Chapman, 15 Kosciusko Pl.; mason, J. Brown.
South Elliott Pl., s s, 150' s De Kalb Ave., 3 three-story brownstone dwells.; cost, \$9,000; owner, Isabella Gordon, 3 Willow St.; architect, R. Dixon; builder, J. Gordon.
Greene Ave., s s, 100' e Bedford Ave., 13 three-story brownstone dwells.; cost, each, about \$8,500; owner, etc., James H. Darrow, 106 Lawrence St.
Bedford Ave., n w cor. Hooper St., three-story brownstone dwell.; cost, \$15,000; owner, Edward Havens, cor. Bedford Ave. and Reap St.; architect, W. H. Gaylor; builders, James Rodwell and C. L. Johnson.
Pratt St., s s, 100' w Hoyt St., two-story brick ticket-office and theatre entrance; owners, Hyde & Belman, Adams St., near Myrtle Ave.; architect, Wm. Taylor; builder, M. J. Reynolds.
Baltic St., No. 228—80 West Smith St., three-story brick tenement; cost, \$5,500; owner, Samuel Frost, 68 Irving Pl., New York; architect, etc., E. G. Vall; mason, John Hayes.
Graham Ave., n e cor. Moore St., 4 four-story brick stores and tenements; cost, each \$6,500; owner, Jacob Kiefer, 142 Graham Ave.; architect, John Platte; builders, Grassman & Maurer.
Pier foot of Hudson Ave., four-story frame elevator; cost, \$4,000; owner, Robert Colgate & Co., Riverdale, N. Y.; architect and builder, H. G. Secher.
Montrose Ave., s s, 150' e Ewen St., three-story frame store and tenement; cost, \$4,000; owner, Charles Ness; architect, J. Platte; builders, J. Schlereth and J. Friesse.
De Kalb and Central Aves., and Stockholm St., one and three-story railroad depot; cost, \$100,000; owner, Brooklyn & Newton R. R. Co.; architect, Edward E. Ralt; builders, John D. Anderson and Wm. Russell.
Hancock St., s s, 410' e Bedford Ave., 3 three-story brownstone dwells.; cost, each \$7,500; owner and carpenter, S. E. C. Russell, 638 Grand Ave.
Twenty-third St., s s, extending to Twenty-fourth St. between Fifth and Sixth Aves., two-story brick car-house and storage loft; cost, \$17,000; owner, Atlantic Avenue Railroad Co., cor. Atlantic and Third Aves.; architect, Geo. W. Anderson; builders, John D. Anderson and John Lee.
Wyckoff Ave., Woodbine and Fry Sts., one-story brick stable; cost, \$28,000; owner, Brooklyn City Railroad Co., 10 Fulton St.; architect, A. W. Dickie; builders, John Lambert and P. Brady.
Wyckoff Ave., Palmetto and Woodbine Sts., two-story brick car-house and hay-loft; cost, \$45,000; owner, Brooklyn City Railroad Co., 10 Fulton St.; architect, A. W. Dickie; builders, W. H. Hazzard & Son and P. Brady.
ALTERATIONS.—Hewes St., No. 145, two-story brick bay-window extension; cost, \$5,000; owner, L. J. Busby; architect, G. S. Teale; builders, W. & T. Lamb.
Ewen St., n w cor. Cook St., two-story brick extension; cost, \$2,500; owner, Wm. Battermann on premises; architect, Th. Engelhardt; builders, G. Doering and H. Loeffler.
Hicks St., n w cor. Cranberry St., raised one-story, interior alterations; cost, \$2,500; owner, Wm. Court, on premises; architect, L. D. Reynolds; builder, M. C. Ruch.
Chicago.
BUILDING PERMITS.—J. S. Marsen, two-story brick store, 24' x 70', 381 Halsted St.; cost, \$3,800.
E. A. Hartwell, four-story brick warehouse, 43' x 100', Lake and Jefferson Sts.; cost, \$12,000.
W. Jacobs, one-story brick store and house, 50' x 70', Paulina and Moorland Sts.; cost, \$5,000.
Union Iron and Steel Co., two-story brick wire mill, 80' x 140', Ashland and Archer Aves.; cost, \$25,000.
Lizzie Lane, two-story brick dwell., 22' x 60', Indiana Ave.; cost, \$4,000.
E. Baggott, two-story brick store, 20' x 60', 152 Fifth Ave.; cost, \$3,000.
T. Mackin, 2 three-story brick dwells., 50' x 74', 241 Illinois St.; cost, \$12,000.
E. W. Jennings, 3 three-story brick dwells., 60' x 40', Washington St.; cost, \$13,500.
Mobile.
STORES.—Perryman Stores, Nos. 48, 50 and 52 North Commerce St., burnt March 20, 1881, rebuilt on original plans; Nos. 48 and 50, contractor, G. E. Tyndall, cost, \$4,200; No. 52, contractors, Martin & Farley, cost, \$1,575.
DWELLINGS.—North-west cor. Church and Jackson Sts., two-story frame dwell.; owner, A. Levy; contractors, John P. Emrie & Son; cost, \$3,500; architect, Jas. H. Hutchison.
North-east cor. Government and Lawrence Sts., two-story frame dwell.; owner, John L. Lauretta; contractor, M. Smith; cost, \$2,600; architect, Jas. H. Hutchison.
New York.
BUILDING PERMITS.—Eighteenth St., n s, 140' e Avenue A, 2 three-story hard-brick factories; total cost, \$9,000; owner, Vernon K. Stevenson, 115 Broadway; architects, D. & J. Jardine; builder, W. C. Fellows.
(Continued on next page.)

SUMMARY:—

Proposed Temporary Ch
— Cost of such Change
Sewerage System — S
Building — Dange
Telephone Wires. — A
Electric-Light Machin
Rod. — Competition for
— Insurance Rates. —
Egyptian Kings. —
COLONIAL ARCHITECTURE. —
BRUCE J. FAIRBANKS. —
THE ILLUSTRATIONS. —
Office-Building, Baltimore
Scottish Sketches. —
LEGAL NOTES AND CASES. —
HOLLAND. —
RELIC HUNTING. —
COMMUNICATION: —
Cold-Air Supply. —
NOTES AND CLIPPINGS. —

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August 20, 1881

BUILDING INTELLIGENCE.

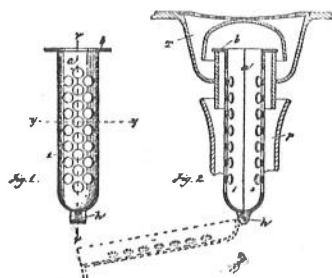
(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents heretofore, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

213,618. SINK-STRAINER.—John M. Stimpson, Boston, Mass. This invention relates to removable strainers for the drain-pipes of sinks, to arrest solid matter and prevent it from escaping into the drain-pipe. The invention has for its object to provide a removable strainer adapted to be easily applied and removed, to be used for a considerable length of time without being cleaned, and to be conveniently cleaned when occasion requires. The invention consists in a strainer composed of a perforated flanged tube, inserted in a sink drain-pipe below the usual ball strainer, and



made in two longitudinal sections adapted to be separated when the strainer is removed from the pipe, so that accumulations of solid matter may be readily removed: a represents the strainer, a perforated tube of metal open at one end and provided with a flange, b. The tube is so proportioned that it can be inserted in a sink drain-pipe, p, below the ordinary ball strainer, t, without completely filling it. The perforations of the strainer are sufficient in size and number to allow the liquids to escape freely. The strainer is divided longitudinally into two separable sections, 1, 2, which are connected at the lower end of the strainer by a hinge, a, so that when removed from the drain-pipe the strainer may be opened, as shown in dotted lines, Fig. 2, for the convenient removal of accumulations of solid matter.

215,218. APPARATUS FOR CONSUMING SMOKE.—William Chisholm, Cleveland, O.

245,269. MORTISING-MACHINE.—John C. Flester, Reading, Pa.

245,260. NUT-WRENCH.—Gillmore C. Fink, St. Petersburg, Pa.

245,318. CINTERN.—John Robertson, Montreal, Quebec, Canada.

245,319. WATER-CLOSET.—John Robertson, Montreal, Quebec, Canada.

245,325. PUMP-SHAFT.—Henry Sprinkel, Cooper, Ill.

245,334. FIRE-ESCAPE.—Julius T. Wolf, Mayville, Wis.

245,345. FIRE-ESCAPE.—Henry Bristol, Westville, Conn.

245,383. AUTOMATIC FIRE-EXTINGUISHER.—John Kane, Philadelphia, Pa.

245,385. STOVE-FIRE-TRIMBLE.—Andrew W. Krapf, Blissfield, Mich.

245,412. LOCK.—Dora H. Flint, Hopkinton, N. Y.

245,419. STEAM-HEATING APPARATUS.—Edward E. Gold, New York, N. Y.

245,494. FIRE-ESCAPE.—Charles A. Gregory, Montreal, Quebec, Can.

245,499. APPARATUS FOR FREEING GUTTERS, STREET-CROSSINGS, AND SIDEWALKS FROM ICE AND SNOW.—James A. Harvey, Burlington, Vt.

245,511. EXTENSIBLE SHADE-BLIND.—Philipp Koell, Brooklyn, N. Y.

245,519. WEATHER-BEARD GAUGE.—John Madison Lawrence, Wimbomburg, Tex.

245,541. SHUTTER-FASTENER.—Alphonse Montant, New York, N. Y.

245,545. ELECTRIC GAS-LIGHTING DEVICE.—Geo. J. Murdoch, Binghamton, N. Y.

245,560. FURNACE-DAMPEN.—Wm. E. Puffer, New York, N. Y.

245,570. VARNISH.—Ernst Schultze, Berlin, Prussia, Germany.

245,574. TREATMENT OF HYDRAULIC CEMENT IN THE KILN.—James B. Speed, Louisville, Ky.

245,589. DEVICE FOR RAISING WEIGHTS WITH JACK-SCREWS.—Walter W. Vaughn, Stockton, Cal.

245,606. BEVEL-SQUARE.—Blanche Weissner, Brooklyn, N. Y., and Henry Birn, Jersey City, N. J.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—A. M. Grimes, additional story to back building, Burke St., n Canton Ave.

Chas. Neale, back building, No. 188 South Ann St., between Thames and Landon Sts.

J. J. Larum, two-sty brick building, w s Jackson St.

AN EXHIBITION

—OF—

Architectural Drawings

—WILL BE HELD—

IN CONNECTION WITH THE FAIR

—OF THE—

Massachusetts Charitable Mechanic Association,

IN BOSTON,

During September and October, 1881.

ARCHITECTS IN EVERY PART OF THE COUNTRY

Are invited to contribute Designs to this Exhibition, and to forward their Contributions as soon as possible.

Drawings may be sent by mail, by express, prepaid, or by freight at reduced rates arranged by the officers of the association, to T. M. CLARK, 178 Devonshire Street; HENRY A. TURNER, 31 West Street; JOHN S. DAMELL, City-Hall, or to the *American Architect*, 211 Tremont Street, Boston, Mass.

BUILDING INTELLIGENCE.

Temperance Temple, 41 and 43 Gay St., two towers and a cornice.

John Thayer, two-sty brick building, 37 Bradford Alley, between Canton Ave. and Aliceanna Sts.

D. Ludwig, three-sty brick building, n e cor. Chase St. and Greenmount Ave.

D. A. Price, two-sty brick back building, 234 Argle Ave.

Leander Jones, additional story to 51 Arlington Ave.

C. A. Gambrell & Co., five-sty brick building and one-sty engine-house; Smith's Wharf.

Thos. Wilson Sanitarium, six-sty brick warehouse, n e cor. Sharp and German Sts.

Marion St. and Jew Alley.

E. S. Smith, 2 two-sty brick buildings, Bethel St., between Canton Ave. and Aliceanna St.

ALTERATIONS.—Mr. Howard Munkkayson is carrying on extensive improvements at his property, 257 Charles St., under plans furnished by Mr. Geo. Archer, architect.

The National Marine Bank, the permit for the erection of which has been noticed, will be immediately proceeded with by Mr. Geo. Archer, architect; cost, \$15,000.

Boston.

BUILDING PERMITS.—Wood.—South St., near Commercial St., for D. J. Cutter, stable, 40' x 60'; J. H. Wilder, builder.

Hypom St., near Warren St., for Mrs. N. E. Temple, stable, 30' x 30', two-sty; John Oliver, builder.

Blue Hill Ave., near Alaska St., for J. S. Kemp, dwell, 22' x 32', two-sty; Henry J. Bartlett, builder.

Beacon St., rear of near Brighton Ave., for Geo. J. Quinsler, dwell, 20' x 25', two-sty; Geo. J. Quinsler, builder.

Terrace St., near Sheridan Ave., for Daniel Seaverns, dwell, 20' x 32', two-sty; J. H. Cox, builder.

Augusta Ave., near Metropolitan Ave., for John Fallon, dwell, 21' x 28'; Geo. A. Spear, builder.

Lafayette St., rear of near Washington St., for Standard Rubber Co., rubber factory, 60' x 110'; F. G. Case, builder.

Border St., No. 178, rear of, for J. Robbins & Co., coal-house, 54' x 116'; J. Montgomery, builder.

Tudor St., near E St., for Robert Bishop, storage, 60' x 110', three-sty.

Commonwealth Pl., near Eastern Ave., for N. Y. & N. E. R. Co., freight-house, 52' x 630'.

Myrtle St., near Dudley St., for B. C. Dennett, 3 dwells, 20' x 24'; B. C. Dennett, builder.

Trull St., near Hancock St., for S. B. Pierce, dwell, 20' x 38', two-sty; Wm. J. Jobling, builder.

Brick.—Newbury St., near West Chester Park, for Oliver Ames, stable and dwell, 25' x 80' 4", two-sty; Vinal & Dodge, builders.

The following permits were issued at the office of Inspector of Building during the month of July:—Brick, 45; wood, 82; wood, special, 1; alterations, 219; boilers, etc., 24; heating apparatus, etc., 46; street, 143. Total, 669.

ALTERATION.—Ebon D. Jordan, Esq., is building an addition to his residence, No. 46 Beacon St., containing staircase hall dining room, picture-gallery, etc., at a cost of about \$47,000; Mr. S. J. P. Thayer, Boston, architect.

HOUSE.—Messrs. Allen & Kenway are the architects of a house for Geo. N. Dana, on Beacon St. It is a stone front, three-sty, 28' x 65'; Vinal & Dodge and L. Greeley, contractors.

BUILDING INTELLIGENCE.

Brooklyn.

BUILDING PERMITS.—Clason Ave., e s, 100' n Willoughby Ave., four-sty brick addition to convent; cost, \$40,000; owners, Sisters of Mercy; architect, P. C. Keely.

Sixteenth St., Nos. 120-124, cor. Fourth Ave., two-sty frame church; cost, \$2,000; owner, Free Methodist Society; architect, A. Blum; builder, J. A. Schiller.

Lincoln Pl., n s, 235' n Seventh Ave., four-sty brick dwell; cost, \$12,500; owner, Ellen L. Condon, 26 Sterling Pl.; architect, C. Werner; builders, M. Ryan and W. Zang.

Floyd St., s s, 360' e Tompkins Ave., three-sty frame tenement; cost, \$4,500; owner, architect and builder, Henry Loeffler, 1921 Stockton St.

Moore St., s s, 100' e Second St., two-sty frame dwell; cost, \$4,250; owner, Jacob Strauss, 20 Moore St.; architect, J. Platte; builders, S. Brendel and J. Rieger.

Truth Ave., n w cor. Sixteenth St., three-sty brick store and flats; cost, \$3,500; owner, James McKiverkan, Parkville, L. I.; architect and builder, R. Dixon.

Heave St., s e cor. Wythe Ave., four-sty brownstone store and tenement; cost, \$9,500; owner, Richard Healey; architect, Isaac D. Reynolds.

Third Ave., n w cor. North Seventh St., four-sty brick store and tenement; cost, about \$10,000; owner, Mrs. O'Donnell; architect, John Mumford.

Bedford Ave., w s, 42' 9" s Quincey St., 2 three-sty brownstone stores and flats; cost, \$10,000; owner, J. H. Ireland, cor. Kent and Cross Sts.; architect, Wm. H. Gaylor; builders, C. King and E. Van Voorhis.

Hicks St., No. 119, two-sty and basement brownstone dwell; cost, \$14,000; owner, Lemuel H. Arnold, 62 Wall St., New York; architect, Stephen D. Hatch; builder, Elbert Snedeker.

Chicago.

BUILDING PERMITS.—N. Schaeckel, two-sty brick dwelling, 22' x 54', 420 West Chicago Ave.; cost, \$4,000.

J. A. Thorn, two-sty brick dwell, 24' x 49', 2,975 Wabash Ave.; cost, \$1,500.

T. Keating, two-sty brick dwell, 22' x 40', 199 Centre Ave.; cost, \$2,500.

F. Drovak, two-sty brick dwell, 20' x 60', 704 Allport Ave.; cost, \$2,000.

A. P. Gilmore, one-sty addition, 80' x 175', 215 Madison St.; cost, \$12,000.

Michigan Ave., Baptist Church, repair church, Michigan Ave., near Twenty-third St.; cost, \$25,000.

M. Smurstein, one-sty brick dwell, 24' x 49', Loomis and Seventeenth Sts.; cost, \$2,000.

H. Keph, two-sty brick dwell, 24' x 64', 608 Twentieth St.; cost, \$2,000.

W. Kruger, three-sty brick store and dwell, 26' x 75', 633 Blue Island Ave.; cost, \$8,000.

C. Lambrecht, two-sty dwell, 20' x 65', 3,474 Broad St.; cost, \$4,000.

W. Werson, two-sty brick dwell, 21' x 60', 3,424 Lock St.; cost, \$3,300.

C. B. Brown, one-sty addition to foundry, 40' x 60', Illinois and Kingsbury Sts.

W. Trimble, brick store and dwell, 22' x 42', Madison and Fortieth Sts.; cost, \$3,000.

F. H. Johnson, two-sty brick dwell, 20' x 60', 3,443 Vernon Ave.; cost, \$6,100.

J. Daub, two-sty brick dwell, 24' x 46', 59 Weiland St.; cost, \$2,500.

G. F. Harvey, two-sty brick dwell, 23' x 37', 269 Church St.; cost, \$3,000.

G. M. Richardson, three-sty brick dwell, 41' x 62', 1338 West Washington St.; cost, \$7,000.

(Continued on next page.)

THE AM

VOL. X.

AUGUST

Entered at the Post Office

SUMMARY:—

The Industrial Schools of New York.—Summer 1881.
Maxim Electric Lamp in Philadelphia, and Boston.
River.—Theft of Paint.
The Forty-second Street of Swiss Villages.

CARBONIC OXIDE AND CAST-IRON.
THE EVOLUTION OF THE PLUM.
LEGAL NOTES AND CASES.

THE ILLUSTRATIONS:—
The Cradock House, Medford.
Chrysler Club House, C.

Haug, Warburg, Gerns.
DECORATION AS APPLIED TO
POINT OF VIEW.

ASPHALT.
THE FINDING OF ROMAN TOWNS.
COMMUNICATIONS:—

Cold-Air Supply.—A Sys.
Architecture.
NOTES AND CLIPPINGS.

We have repeatedly had schools established in New York of Art in a small way two thanks to the generosity developed into what might trade university, comprehension in house and decoration plumbing and sanitary work branches, all taught in the retically and practically, purpose, and with the ear best masters in the several season, it has been decided separating the classes in from those which devote only. This progress has another gentleman, who lars to the Metropolitan ment of art education, the a separate building, the for the classes in applied building, on the corner Street, for the strictly te Wingate, S. E., well kno editor of the *Sanitary* the latter division of the ing as director of the a Street rooms. The nex vision, instruction will building in sanitary engi technical science of hou the finishing of various theory and practice of b lished with the advice of layers' Association, an drawing, in the laying o in the principles govern of arches; besides prac the laying of face-brick arches and cornices. I tution two evenings in the fee will be only five masons and bricklayers tracted by the high w inhabitants, few of w this opportunity to adv estimable value. The l in promoting the establ use its utmost influence of the trade, sojourning the pleasant occupation fluence which family selves in joining the cl

PRISON.

issued by the United States Patent Office
 in pursuance of one-third to John L. Ketcham, of

City of Marion, and State of Indiana, have invented certain

the necessity of personal contact between them and the
 prisons; and it consists, first, of a circular cell structure
 and surrounded by a grating in close proximity thereto,
 prisoners; second, in the combination, with said cell
 in constructing within said circular cell structure a
 in the side of the cells next said central opening to serve
 convey away into a sewer with which it is connected
 of a central vertical hollow shaft, which will also
 the more specifically set forth.

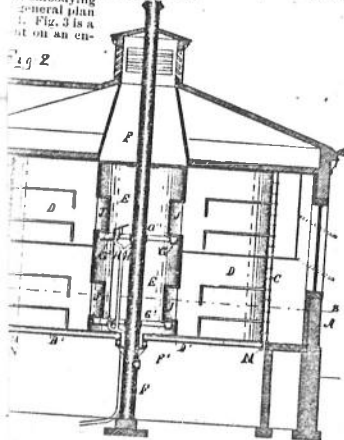
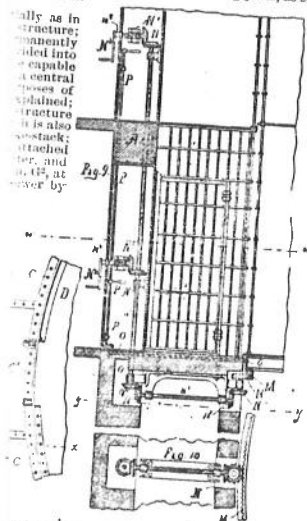


Fig. 2. I-pipe, and the operating mechanism
 of the same, as shown in Figs. 3 and 5. Fig. 3
 is a plan view of the mechanism by means of which the
 lower central portion of Fig. 3, but on a larger
 scale, as would be seen when looking down
 into the dotted line in Fig. 9, showing the operat-
 ing mechanism of the doors, which are too
 small to show in the plan view, looking toward the top
 of the operating mechanism and surrounding parts, as seen
 in Fig. 9.



the plate or grating which forms the roof of
 the central ventilating shaft, and are a part of the
 structure, as it revolves, is prevented from
 top; M, a rack attached to the outer edge of
 the said rack, and is driven preferably by a
 set of gears, N, N', N'', etc., as shown;
 structure may be immovably locked in one
 position, or may be rotated by a central ver-

THE AMERICAN ARCHITECT AND BUILDING NEWS.

VOL. X.

Copyright, 1881, JAMES R. OSGOOD & Co.

No. 297.

SEPTEMBER 3, 1881.

Entered at the Post Office at Boston as second-class matter.

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AN effort was made during the last session of the New York Legislature to procure the passage of a long series of amendments to the present Building Law of that State, but although passed by one of the houses, they failed of enactment. A few changes were, however, made, all of them relating to the mode of procedure in enforcing the statute except one, which provides that nothing in the Act "shall be so construed as to prohibit the building of frame buildings with shingle roofs and eight-inch brick foundation-walls under the same in the Twelfth, Twenty-third and Twenty-fourth Wards of the city of New York, north of One Hundred and Fortieth Street;" and permits also the construction in the same district of "buildings not exceeding two stories in height above the basement, having basement walls twelve inches in thickness, and walls above the basement eight inches in thickness, constructed of hard brick and good mortar." Ward Twelve comprises the narrow upper end of Manhattan Island, from the Park to Spuyten Duyvil, Wards Twenty-three and Twenty-four are on the main-land, and include the villages of Morrisania and West Farms. That in the latter district, particularly, there is good reason for relaxing the law so as to permit the erection of two-story cottages is plain enough. For the first time, the elevated railroads have made it possible for the average working-man in New York to exchange the stifling tenement for a modest house of his own, without the serious inconveniences to which a residence beyond the rivers would subject him, and it is certainly wise to promote by legislative permissions the rapid construction in the territory served by the elevated roads of such houses as the working-men can afford to build and live in; but it is doubtful whether in extending its sanction to the erection of frame structures within the building limits, at least upon Manhattan Island, the Legislature has not gone much too far. The "frame building with eight-inch brick foundations" to which the new law refers would represent a structure little removed from a squatter's shanty, and the lining of the beautiful streets above One Hundred and Fortieth Street with such buildings would be an irremediable injury to the city. Building is now going on in New York at the rate of about fifteen hundred houses per annum. An average block contains less than sixty buildings, and a very brief inspection of the map will show that, deducting the villages of Manhattanville, Carmanville, and Fort Washington, with the precipitous banks of the Hudson and Harlem Rivers, all the available building-lots on Manhattan Island would, at the present rate, be occupied with four-story structures of brick and brownstone in something like fifteen years; and it is much to be regretted that license should have been given to improvident owners or lessees to jeopardize, by frail and inflammable erections, the vast amount of property which will soon be collected in the upper wards.

AN assertion is made by the Chicago Real Estate and Building Journal which should attract the attention of the proper authorities at once. According to the Journal, an examination of the walls of the new Custom-House, made in its interest, shows the existence of eleven fissures, accompanied with dislocations so serious as to force the bricks partly out of the masonry,

and bend the iron window-frames. In its opinion the cracks extend to the foundations, and are the result of settlement of the ground under them. The examination does not seem to have been very complete, and probably no good opportunity offered for making it so; but no time should be lost, unless the story is a pure fabrication, which is not likely, in making a thorough investigation. This is the more important in view of the fact that the first expert commission which inspected the structure at the time when its security was called in question decided, after careful testing of the ground and computation of the loads upon it, that the structure could not be completed with safety; and advised its demolition. The members of the second commission looked at the circumstances a little more favorably than the first, and agreed that the building might be finished without danger, but only on condition that its weight should be diminished by important changes in the construction of the upper portions, which were made in accordance with their recommendation.

CINCINNATI has encountered a difficulty such as will be met more and more frequently by those inland cities which are situated on important rivers. The suburb of Walnut Hills has increased so much in population of late years, owing, as some say, to the smoke nuisance which is rendering the city itself uninhabitable, that the imperfect drainage of the place has become a matter of serious importance. At present there are no public sewers, and the multiplicity of private vaults and cesspools has already been, as is supposed, the cause of a malarial epidemic, and bids fair to produce still worse evils. In this extremity, some of the inhabitants have bethought themselves of a large sewer, opening into the Ohio River, which was constructed some years ago expressly to form an outlet for the future drainage of the district, and have asked permission to construct at their own expense a branch drain leading into it. Unfortunately the outfall of the main sewer is situated above the point at which the supply for the city water-works is taken from the stream, and no proposition for making it a conduit for sewage can possibly be entertained. The only alternative seems to be the construction of a longer drain, which shall take the waste of Walnut Hills by a circuitous route to an outfall below the water-works, but this will be a costly undertaking, the expense being estimated at not less than a million and a half. It seems as if here might be a favorable opportunity for an experiment in sewage irrigation. The circumstances are unusually favorable: the river is so near that there will be no need of providing for surface-water, that great obstacle to successful irrigation; and small pipes, conveying only concentrated house-wastes, will be quite sufficient; while the elevated situation of the village, and the ample tracts of neighboring land available for cultivation, will render the problem a comparatively simple one, and the tax-payers of Cincinnati, by contributing toward the enterprise even half of the annual sum which the long sewer would cost them in interest, might insure its success.

A CERTAIN revival of interest in the World's Fair project is to be observed in several quarters. The committee appointed in Boston to consider the expediency of holding it in that city has done its work with such preternatural secrecy as to suggest the idea that it had abandoned its functions altogether; but occasional rumors in regard to its deliberations have served to keep alive a small remnant of expectation, and within a few days have appeared symptoms of some impending development; whose character can, however, not yet be divined. In other cities the Boston enterprise is looked upon as entirely dead, and some of the original subscribers to the Fair in New York have undertaken a second time to call the attention of wealthy individuals and corporations to the scheme. Three million dollars have already been pledged, but the promoters intend to wait before taking any definite action until the great railroad corporations indicate their willingness to make subscriptions adequate to their means and to the profits which they would derive from the actual carrying of the plan into execution.

THE epidemics of intermittent fever which have appeared in Western Massachusetts seem in a fair way to be thoroughly investigated, and it may be hoped that an important addition to our knowledge of the subject will be the result. The most energetic action has been taken in Lenox, where the disease

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Sept 3, 1881

BUILDING INTELLIGENCE.

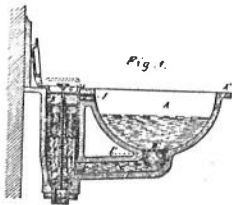
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BUILDING PATENTS.

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243,718. **WASH-BASIN.**—Charles H. Moore, Yonkers, N. Y. This invention consists of a wash-basin, a slab, and an outlet-chamber, made in one piece, with a float operating in the outlet-chamber, and a soap-dish fitted in the surface-opening of said chamber. It also consists of a plug-valve fitted in an independent valve-seat secured in the bottom of the outlet-chamber. A' shows the slab, A the bowl, and B an enlarged chamber, adapted to contain a soap-dish, in the surface-opening, and extending downward to the outlet. This chamber has a float operating in it, and is



shaped at the lower end and to receive an independent seat for the plug-valve to operate in. This valve-seat has a shank on it, and is secured to the end of chamber B with a lock-nut. The float H, operating in the chamber B, is intended to lift the valve e in case of any accidental increase of water in the basin; and the channel f, which is most applicable to bath-tubs, is intended as an auxiliary to supply the outlet or float-chamber B. B' is a counter-sunk outlet of the basin A, into which a movable strainer, E, is fitted to afford access to the passage G. G represents a soap-dish fitted in the open chamber B, having a passage through it for the spindle of the plug-valve to operate in.

246,593. **STEAM ROCK-DRILL.**—Samuel G. Bryer, Saugus, Mass.

246,597. **SHEET-METAL AND CONCRETE PIPE FOR DRAINS, &c.**—Mortimer M. Camp, New Haven, Conn.

246,606. **LOCK.**—Frederick Egge, Bridgeport, Conn.

246,609. **WINDMILL.**—Francis J. Goldsmith, Painesville, O.

246,615. **BOLT.**—William T. Kenyon, New Britain, Conn.

246,618. **FAUCET.**—Thomas F. Langley, East Kingston, N. H.

246,620. **WARMING AND VENTILATING APARTMENTS BY THE SUN'S RAYS.**—Edward S. Merce, Salem, Mass.

246,631. **KNOB FOR LATCH-LOCKS.**—Henry M. Paine, Newark, N. J.

246,639. **TRANSOM-LIFTER.**—Henry E. Russell, Jr., New Britain, Conn.

246,642. **DOOR-HANDLER.**—Samuel Selden, Erie, Pa.

246,655. **MARINE STRUCTURE FOR WATER-WORKS.**—Geo. R. Bramhall, Chicago, Ill.

246,656. **WEATHER-STRIP.**—James C. Brannon, Independence, Kan.

246,658. **FIRE-ESCAPE.**—Robert Bustin, St. John, New Brunswick, Canada.

246,659. **CURTAIN-CORD TIGHTENER.**—Samuel G. B. Cook, Baltimore, Md.

246,663. **PANTOGRAPH.**—James B. Crocker, Jr., and Bernard Frese, Chicago, Ill.

246,684. **SELF-CLOSING VALVE AND FAUCET.**—Geo. R. Moore, Philadelphia, Pa.

246,703. **DETACHABLE SAW-TOOTH.**—Ellas C. Atkins, Indianapolis, Ind.

246,704. **SASH-HOLDER.**—Albert Ayers, Rahway, N. J.

246,708. **SPRING-HINGE.**—Joseph H. Banker, Cincinnati, O.

246,709. **STOVE-PIPE DAMPER.**—Ashbell Barnum, Green Island, N. Y.

246,719. **PLUMBER'S TRAP.**—Andrew Campbell, Brooklyn, N. Y.

246,736. **MACHINE FOR FORMING METALLIC RIVET-HEADS.**—James Dunn, Fort Hope, Ontario, Canada.

246,741. **HUSTRING-APPARATUS.**—Albert C. Foster, Lake, Ill.

246,746. **SCREW-DRIVER.**—George E. Gay and John H. Parsons, Augusta, Me.

246,752. **HASP-LOCK.**—Hanson Goodrich and Joseph R. Siddall, Milledgeburg, Ill.

246,767. **CHIMNEY-FLUE BRUSH.**—David C. Greenway, Abingdon, Va.

246,762. **PRESERVING WOOD.**—Erwin Hagen, St. Louis, Mo.

246,781. **AIR-COOLING APPARATUS.**—Ralph S. Jennings, Baltimore, Md.

246,783. **MOULD FOR FORMING THE WALLS OF CISTERNS OR WELLS.**—Olof Johnson and Johan J. Sandstrom, Algona, Ia.

246,790. **HEATING-APPARATUS FOR BUILDINGS.**—Ernst Korting, Brunswick, Germany.

246,801. **PUMP AND WATER-ELEVATOR.**—Charles L. Merrill, Indianapolis, Ind.

AN EXHIBITION

—OF—

Architectural Drawings

—WILL BE HELD—

IN CONNECTION WITH THE FAIR

—OF THE—

Massachusetts Charitable Mechanic Association,

IN BOSTON,

During September and October, 1881.

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Are invited to contribute Designs to this Exhibition, and to forward their Contributions as soon as possible.

Drawings may be sent by mail, by express, prepaid, or by freight at reduced rates arranged by the officers of the association, to T. M. CLARK, 178 Devonshire Street; HENRY A. TURNER, 31 West Street; JOHN S. DAMRELL, City-Hall, or to the *American Architect*, 211 Tremont Street, Boston, Mass.

BUILDING INTELLIGENCE.

246,814. **LOCK-HINGE.**—Charles W. Pierce, Oak Hill, N. Y.

246,815. **VENTILATING-MACHINE.**—William A. Pitt, New York, N. Y.

246,840. **WOOD-BORING MACHINE.**—James M. Trackwell, Skookumchuck, Wash.

246,841. **WINDPOT, SKYLIGHT, &c.**—William Trotter, Jr., Oyster Bay, N. Y.

246,845. **APPARATUS FOR ILLUMINATING BUILDINGS.**—Jonah B. Whitcomb, Berkeley, Cal.

246,846. **EXPANDING MANUREL.**—John A. Wilde, Hudson, N. Y.

246,853. **VENERING WOOD.**—George Woods, Cambridgeport, Mass.

9,860. **(Reissue.) COMBINED CLUTCH AND BRAKE OF HOISTING-DRUMS FOR ELEVATORS, &c.**—Julius S. Lane, Akron, O.

BUILDING INTELLIGENCE.

Cedar Grove Cemetery, Adams St., near Milton St., for City of Boston, greenhouse, 23' x 63', 2 cells 11' x 80' 6" each; John H. Burt & Co., builders.

Parker St., near Dorchester Ave., for A. W. Tice, dwell., 24' x 30', two-sty.; Charles Stinson & Co., builders.

Hoffman St., rear of, near Gilbert St., for Michael Mitchell, stable, 20' x 32'; John L. Dakin, builder.

Hartford St., near Sargent St., for James D. McLeh, dwell., 22' x 32', two-sty.; Jas. D. McLeh, builder.

Jordan St., near Bellevue St., for Edward N. Capen, storage of carriages, 38' x 50', two-sty.; J. B. Keene, builder.

Crawford St., cor. Elm Ave., for G. Dary, dwell., 30' x 52', two-sty.; Wilson Bros., builders.

Pynchon St., rear of, near Tremont St., for Metropolitan R. Co., 24' x 50'.

Irish - Trumbull St., No. 21, for Bridget Goldie, dwell., 38' x 60', three-sty flat; Jeremiah J. Spillans, builder.

Chauncy St., Nos. 30 and 32, for W. S. Dexter, mercantile, 23' 9" x 100', five-sty flat; M. S. & G. N. Miller, contractors.

Chauncy St., cor. Rowe Pl., for David and Henry C. Nevins, mercantile, 53' x 80', six-sty.; Timothy E. Stuart, builder.

Brooklyn.

Second St., brick chimney, 20' x 6' at base and 16' x 40' at top; cost, \$2,300; owners, C. C. Reed & Co.; builder, Wm. L. Langridge, Jr.

Quincy St., n. e. between Yates and Lewis Aves., 3 three-sty brownstone dwell.; cost, \$8,000 each; owner, A. G. Vandewater, 450 Fifth St.

Plymouth St., n. s. 70.5 w Pearl St., rear, three-sty brick storehouse; cost, \$5,000; owner, E. W. Bliss; builders, M. Reed and E. Snedeker.

North Seventh St., n. s. 100 w Seventh St., three-sty frame tenement; cost, \$3,500; owner, William Colt, 215 Carroll St.; architect, Baldwin Pettit; builders, Bruce & Dickerson and Baldwin Pettit.

Monroe St., 350 w Yates Ave., two-sty brick dwell.; cost, \$4,000; owner, Samuel Organ, 547 Monroe St.; architect, R. B. Eastman; builder, J. De Revere.

Baltic St., s. e. cor. Nevins St., one-sty brick moulding-mill; cost, \$5,000; owner, John S. Loomis, 325 President St.; architect, David R. Long; builders, Nash & Partell.

On Dock, between Broadway and South Sixth St., two-sty brick factory, etc.; cost, \$20,000; owner, New York Ferry Co., foot Broadway; architect, W. B. Ditmars; builders, Griffith J. Roberts and Jenkins & Gillies.

Second Ave., w. s. near 6th St., two-sty frame factory; cost, \$2,800; owners, Chambers Bros.; architect and builder, H. E. Fickett.

Ninth St., s. w cor. Seventh Ave., 3 three-sty brownstone dwell.; cost, \$7,000 each; owner, P. Mulhady, 576 Quincy St.; builders, John Assip and P. Ward.

Butler St., n. s. 200 e Nevins St., two-sty frame sash and blind factory; cost, \$3,500; owner, etc., Stanley Muckles, 572 Pacific St.

Commercial St., n. s. 200 e Ann St., two-sty brick machine-shop; cost, \$5,000; owner, Havemeyer Sugar Refining Co.; mason, J. B. Woodruff.

Lafayette Ave., n. s. bet. Tompkins and Marcy Aves., 3 three-sty brownstone dwell.; cost, \$8,250 each; owner, William Leinken, 202 South St., New York; architect and builder, John H. Smith.

Elm St., No. 31, three-sty frame tenement; cost, \$3,500; owner, Henry Steinmann, cor. North Ninth and Fifth Sts.; builder, John Rieger.

Columbia St., e. s. 73 s Ninth St., three-sty brick

(Continued on next page.)

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—Fifteen permits have been issued during the past week, the following being the most important:—

S. D. Price, 9 dwells., Ann St., north of Biddle St.

Henry Sprain, brick dwell., 25 Bethel St., bet. Pratt and Lombard Sts.

Henry Winder, three-sty brick building, n. w cor. Hudson and Henry Sts.

Lewis Seldner & Son, five-sty warehouse, Liberty St., bet. German and Lombard Sts.

Joseph Turner, 8 three-sty brick dwell., Townsend St., commencing at s. e. cor. John and Townsend Sts., and 7 three-sty brick dwell., John St., commencing 100' south of Townsend St., corner houses 20' front, others 17'; cost, \$3,500 each; E. G. Lind, architect.

Epworth Church.—Brick and stone church building, cor. Mosher and Gilmor Sts.

James Corner & Sons, brick and iron warehouse, Ann St., south of Thames St.

WAREHOUSES.—Two brick warehouses, 24' x 85' each, stone and terra-cotta finish, to be built for Mr. A. Brafman and Mr. Lewis Seldner respectively, are now in process of erection on Liberty St., near German, cost, \$20,000 and \$12,000; B. E. Bennett, contractor; Chas. L. Carson, architect.

ALTERATIONS.—The front and interior of "Temperance Temple," South Gay St., near Fayette, are being re-modelled under drawings prepared by Mr. Jackson G. Gott, architect. The improvements, which will cost about \$6,000, are being executed by Mr. Henry C. Albaugh.

CLUB-HOUSE.—The competition for the "Merchants' Club," participated in by Messrs. J. A. & W. T. Wilson, Niermie & Son, C. E. Cassell, and J. C. Neilson has resulted in the selection of the design submitted by Messrs. Niermie & Son, a premium of \$100 being awarded to each of the other competitors. The building is to be about 49' x 81', located on German St., near South, and will cost about \$25,000.

Boston.

BUILDING PERMITS.—Wood.—Webster St., near Cambridge St., for Ebenezer A. Hollis, 2 dwells., 20' x 30', L 18' x 28', two-sty.; Henry M. Ferry, builder.

Warner Ave., near Harvard St., for Herbert E. Dennett, 2 dwells., 19' x 30', two-sty.; Joseph Stewart, builder.

Warner Ave., near Harvard St., for Herbert E. Dennett, dwell., 19' x 33', two-sty.; Joseph Stewart, builder.

THE A

VOL. X.

SEPTEMBER

Entered at the Post Office

SUMMARY:—

The Death of President Garfield, Va.—Gump

of the New Portions of the

Exhibition.—The Attac

tion of the Thames.—

Railway Freight House

Germany.—A Party-W

"Near Woodstock Town"

THE FAIR OF THE MASSACHUSETTS

SOCIATION.

CEMETERIES REFORMED.—II

THE ILLUSTRATIONS:—

House at Syracuse, N. Y.

monde.—Foreign Skete

ville, O.

LEGAL NOTES AND CASES.

THE REVELATIONS OF SANTA

NOTES AND CLIPPINGS.

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J. A. Devoe, a meteorologist

BUILDING INTELLIGENCE.

(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

246,281. HINGE.—Benjamin S. Atwood, South Abington, Mass.
246,286. DOOR-HANGER.—Caleb Brinton, Chicago, Ill.
246,293. PIPE-JOINT.—Edouard Cooman and Pierre Dillhard, Paris, France.
246,323. DOOR-SPRING.—Isaac B. Lockwood, Rockford, Ill.
246,351. DOOR-SPRING.—Francis S. Taggart, Freeport, Ill.
246,359. ROOFING COMPOSITION.—William B. Allman, Indianapolis, Ind.
246,368. WOOD-SCREW.—James W. Campbell, Brooklyn, N. Y.
246,375. FIRE-ESCAPE.—John R. Day, New York, N. Y.
246,382. RATCHET-DRILL.—Edward G. Felthousen, Buffalo, N. Y.
246,419. AUTOMATIC SASH-PIVOT.—Thomas J. Morgan, Chicago, Ill.
246,445. COMBINATION-TOOL.—Otho G. Rombolt, Chicago, Ill.
246,458. LOCKING-LATCH.—Joseph H. Woolston and Thomas B. Priddy, New Haven, Conn.
246,454. TRAP.—Ludwig Brandeis, Brooklyn, N. Y.
246,457. WATER-FILTER.—Thomas G. Candlish, St. Louis, Mo.
246,481. WRENCH.—Abraham G. W. Foster, Newnan, Ga.
246,489. FIRE-HYDRANT.—Allen J. Fuller, Philadelphia, Pa.
246,513. BIT-BRACE.—Frederick W. Ireland, Buffalo, N. Y.
246,519. SKETCHING-BLOCK.—Charles R. Lamb, New York, N. Y.
246,521. STOVE-PIPE THIMBLE.—Joseph M. Lauby, Brookfield, Wis.
246,531. GONG-BELL.—Patrick McMahon, New York, N. Y.
246,542. METALLIC ROOFING-SHINGLE.—Henry S. Northrop, Pittsburgh, Pa.
9,851. (Reissue.) PLAF-LINING, AND DIE FOR FORMING THE SAME FROM CLAY.—Charles A. Freeman, New Cumberland, W. Va.

SUMMARY OF THE WEEK.

Baltimore.
BUILDING PERMITS.—Since the last report eighteen permits have been granted, mostly for structures of minor importance. The following have been selected:—
Thomas Cassard, three-story brick building, Fayette St., between Caroline and Bond Sts.
Frank Walpelt & Co., brick warehouse, 173' in depth, fronting on McKim St. and Greenmount Ave., between Madison and Eager Sts.
H. E. Goethe, two three-story dwellings, 32 Hildeley St., between Hamburg and Steiress Sts.
Female House of Refuge, to improve and enlarge building, Carey St., north of Baker St.
Malcolm Crochton, five-story warehouse, North St., north of Bath St.
G. Zimmerman, eight three-story dwellings, John St., between Lee and Decker Sts.
WAREHOUSE.—A five-story basement warehouse, brick, with stone trimmings, is in course of construction on Hanover St., between Pratt and Lombard Sts., for the trustees of the Wilson Sanatorium Fund; cost, \$23,000. Mr. C. E. Cassell, architect; Messrs. Henry Smith & Son, contractors.
STORE.—Messrs. Healey & Eckhardt, builders, are erecting a three-story store and dwelling for Dr. Geo. A. Frances, druggist, on the north-east corner of Gay and Monument Sts.

Boston.

BUILDING PERMITS.—Lake St., rear of, near Kendrick St., Ward 25, stone building, 114' and 63' x 219', with one wing 51' x 65', and one 34' x 65'; mason, James Fagan, owner, Right Rev. John J. Williams. This building is for a four stories high. Its purpose is a seminary or college where young men may be educated for the Roman Catholic priesthood.
Jackson St., No. 366, rear of, brick stable, 17' x 30'; mason, Antoin Xavier, owner, Edwin Morey.
Hayward Pl., No. 2, four-story store, 22' 9" x 60' 10"; builder, J. H. Coon.
Near Prison Point Bridge, one-story wooden car-house, 40' x 416'; owner, Eastern Railroad Co.; builder, Peter Walling.
Unnamed Pl., off Regent St., 2 wooden dwellings; George L. Thayer, builder, James W. Lord.
South St., cor. Hathaway St., two-story dwell., 36' and 41' x 40'; Wm. Milnot, Jr., owner; W. H. Bowker, builder.
West Third St., No. 337, wooden dwell., 18' x 32'; owner, Hormel Bencks; builder, Wm. T. Eaton.
Northern Ave., Commonwealth Flats, two-story flat roof, storage of freight, 200' and 212' x 676' and 646'; owner, New York and England R. R. Co.
Wyman Pl., off Centre St., three-story wooden dwell., 22' x 32'; owner, George Coombs; builder, Frank A. Schell.

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BUILDING INTELLIGENCE.

Charles St., cor. Unnamed St., building.
Charles St., near Unnamed St., building.
Charles St., cor. Freeman St., building.
Charles H. Wetmore is owner and builder of each of the above four buildings; they are 26' x 34' each, two-story, hip roof.
Breed St., near Ashley Ave. (Orient Heights), two-story wooden dwell.; owner, Harriet Adams; builder, George W. Adams.
Unnamed Pl., off Chestnut Ave., two-story wooden dwell.; owner and builder, S. A. Deshon.
MONTHLY STATEMENT FOR AUGUST.—Brick, 35; wood, 60; alterations, repairs, etc., 240; boilers and engines, 32; heating-apparatus, 65.

Brooklyn.

BUILDING PERMITS.—Grand Ave., n.w. cor. Putnam Ave., two-story brick and stone stores and dwellings; cost, total, \$9,000; owner, Martin E. Kingman, on premises; builder, O. D. Thompson.
Marcy Ave., e.s. 25' n. Walton St., one-story brick foundry; cost, \$2,500; owner, North American Iron Works, 40 Walton St.; architect, W. H. Doughty; builder, Jno. Auer.
Fulton St., e.s. cor. Grand Ave., five-story brownstone stores and flats; cost, \$10,000 and \$13,000; owner, C. L. Donnell, President St. near Henry; architect, R. Dixon; builder, C. E. Donnell.
Broadway, e.s. 36' s. Siegel St., three-story frame store and tenement; cost, \$7,000; owner, Henry Otto, Boerum and Leonard Sts.; architect, J. Platte; builders, H. Grassman and H. Loeffler.
South First St., near River, four-story brick warehouse; cost, \$15,000; owner, etc., Brooklyn S. R. Co.; mason, S. J. Butrus.
Putnam St., n.s. 250' w. Yarcy Ave., five-story frame dwellings; cost, each \$3,000; owner and builder, D. Morris, Clifton Pl. near Marcy Ave.; architect, S. Feden, Jr.
Central Ave., s.w. cor. Forrest St., three-story brick tenements; cost, \$9,000; owners, S. Liebmann's Sons, Forrest St., cor. Bremen; architect, Th. Engelhardt.
North Seventh St., s.s. 175' e. Seventh St., one-story brick factory; cost, \$4,385; owner, A. B. Ansbacher, 43 John St., New York; architect, Th. Engelhardt; builders, Benj. Mills and O. H. Doolittle.
Floyd St., s.s. 175' e. Tompkins Ave., three-story frame tenements; cost, \$9,000; owner, A. Froehlich, 202 Stockton St.; architect, Th. Engelhardt.
Boerum St., No. 218, s.s. 100' e. Bushwick Ave., three-story frame tenement; cost, 3,700; owner, Jos. J. Froehlich, Graham Ave., cor. Stagg St.; architect, Th. Engelhardt.
Trent St., No. 184, s.s. 250' e. Lee Ave., three-story brownstone dwell.; cost, \$8,000; owner, A. Resler; architect, Wm. Armstrong; builder, Thomas Gibbons.

Chicago.

BUILDING PERMITS.—P. Winter, two-story brick addition, 21' x 75', 935 West Madison St.; cost, \$2,000.
J. Hickerman, three-story flats, 22' x 66', 2806 Wallace St.; cost, \$4,300.
J. H. McAvoy, three-story brick store, 69' x 90', Cottage Grove Ave. and Twenty-fifth St.; cost, \$26,000.
Angela O'Reilly, two-story brick dwell., 21' x 45', Dearborn and Twenty-ninth Sts.; cost, \$2,200.
Wm. Van Arman, three-story brick dwell., 40' x 60', 2015 Prairie Ave.; cost, \$3,000.
C. Palzen, two-story brick store and dwell., 25' x 72', State and Thirty-seventh Sts.; cost, \$6,000.
M. Murphy, two-story brick dwell., 22' x 46', 3250 La Salle St.; cost, \$2,400.
F. Meyer, four-story brick factory, 48' x 180', Clifton and Harrison Sts.; cost, \$25,000.
C. Seipp, ice-house, 20' x 106', Augusta and Paulina Sts.; cost, \$20,000.

BUILDING INTELLIGENCE.

J. F. Lawrence, 2 one-story brick dwell., 20' x 30', North Ave., near Milwaukee; cost, \$2,000.
J. Jiran, two-story brick dwell., 20' x 56', Eighteenth St., near Throop St.; cost, \$3,100.
H. Sherer, two-story brick stores and dwell., 40' x 78', State and Fifteenth Sts.; cost, \$6,000.
D. Larson, two-story brick dwell., 20' x 60', Newberry Ave., near Wright St.; cost, \$2,000.
A. Erickson, two-story brick dwell., 20' x 60', 424 West Eighteenth St.; cost, \$3,800.
P. Helman, two-story brick dwell., 25' x 67', Sixteenth and Seward Sts.; cost, \$4,200.
J. Hardy, two-story dwell., 20' x 38', Eighteenth St., near Throop St.; cost, \$2,500.
J. Wolford, two-story brick dwell., 22' x 36', Archer and Wentworth Aves.; cost, \$2,000.
C. B. & Q. R. Co., six-story brick office-building, 128' x 180', Adams and Franklin Sts.; cost, \$300,000.
A. G. Dinneen, three-story brick dwell., 26' x 40', 90 Page St.; cost, \$4,000.
H. Strong, five-story brick stores, 60' x 125', Monroe St. and Fifth Ave.; cost, \$80,000.
M. Field, five-story brick stores, 41' x 90', Monroe St. and Fifth Ave.; cost, \$30,000.
C. Furst, five-story brick stores, 54' x 100', 197 Adams St.; cost, \$55,000.
J. W. Fiova, one-story brick building, 60' x 126', Pine and Oak Sts.; cost, \$40,000.
J. Len, three-story flats, 22' x 60', 237 Wells St.; cost, \$6,500.
J. A. Owens, two-story brick dwell., 29' x 60', Cobble St., near Oak St.; cost, \$3,500.
J. Jackson, three-story brick store, 30' x 40', Fifteenth St., near Ada St.; cost, \$6,000.
Anna Agoston, two-story brick dwell., 20' x 56', 696 May St.; cost, \$2,600.
J. Elner, additional story, 24' x 116', 223 Kinzie St.; cost, \$3,500.
Dr. Bugoe, three-story brick dwell., 22' x 40', 5 Washington Pl.; cost, \$8,000.
R. Kasser, two-story brick store and dwell., 22' x 30', 920 North Halsted St.; cost, \$2,500.
A. Kruger, two-story brick dwell., 21' x 40', 391 Maxwell St.; cost, \$3,500.
City, three-story school-house, 73' x 85', Johnson and Wright Sts.; cost, \$40,000.
G. B. Cunee, 2 four-story flats, 50' x 60', 60 North Franklin St.; cost, \$10,000.

Cincinnati.

HOUSE.—Mr. T. T. Haydock is building a fine stone dwelling-house on Walnut Hills; cost, about \$30,000; Jas. W. McLaughlin, architect.

New York.

BUILDING PERMITS.—Fourth St., s.w. cor. Mulberry St., six-story iron and brick store and manufacturing; cost, \$25,000; owner and builder, Jas. Casan, 886 Flushing Ave., Brooklyn; architect, E. Gruw.
One Hundred and Twenty-second St., n.s. 100' e. Eighth Ave., four-story brownstone tenement; cost, each \$14,500; owner, Clara Emrich, 608 East Eighty-ninth St.; architect, J. Brandt; builder, Geo. E. Burck.
Sixty-second St., s.s. 100' e. Second Ave., five-story brick tenements; cost, each \$7,000; owner, Joseph Redman, Sixtieth St. and Third Ave.; architect, A. B. Ogden; builders, Cook & Higgins and J. C. Underfield.
Third Ave., n.w. cor. Ninetieth St., three-story brownstone tenements; cost, each \$10,000; owner, W. H. Browning, 443 East Seventeenth St.; architect, A. B. Ogden.
Ninetieth St., n.s. 73' w. Third Ave., four-story brownstone tenements; cost, each \$10,000; owner, (Continued on next page.)

SUMMARY:—

The Architectural Department of Technology: New I.—The Buffalo Soldiers' Passaic River.—Collection Museum.—Re-Solar Heat.—A New City Independent of the THE CONSTRUCTION OF LINN. CEMETERIES REFORMED. THE ILLUSTRATIONS:—Christian Church, Wash. Mauch Chunk, Pa.—S. France.—Palace of M. THE HEATING, LIGHTING AND DRAINAGE OF DEPUTIES. DAMP: ITS CAUSES, EFFECTS, MAHOAGNY. ARCHITECTS' CHARGES. NOTES AND CLIPPINGS.

THE Architectural Department of Technology will of new organization, which, its former curriculum scope materially, and provides for instruction. The on one professor will be representing the general in Charge, while Mr. W. P. Professor of Architectural Assistant Professor Létyan instruction in a new department Laboratory, where studied by means of actual illustration by practical habit of free-hand sketching attention at the Institute, provision has been made for best architectural draughts pen-and-ink rendering, and an advanced character. The Society of Architects, who of much service to the ornament and the arts alike of familiar lectures, delivered of the Society and others. Mr. Henry Van Brunt has Ornament; Mr. Charles A. upon Interior Designative Painting; Mr. Longfellow and other gentlemen will cdition to the regular students will continue to enjoy friendly relation between those of the Museum of them, and which increases

THE courses pursued in Institute will form a somewhat, but will, it is hoped, principle now universally that the laws of structure ed only by studying them has begun to find application, but its peculiar value understood by those who has not received the public difficult for any one but an architecture suffers, not fr constructors, but from the of the science which they and those of architectural cited in our minds, so that ing, or a pointed arch, unless suggest thoughts of propo

Sept 24, 1881

BUILDING INTELLIGENCE.

(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

- 246,862. SAFETY ATTACHMENT FOR ELEVATORS. — Ephraim B. Bishop, San Francisco, Cal.
- 246,865. BRIDLE FOR BRUSHES. — Edwin S. Chandler, Bennington Centre, Vt.
- 246,871. FIRE-ESCAPE. — Alphonse T. Cwerdinski, St. Louis, Mo.
- 246,876. SASH-FASTENER. — Charles L. L. Emery, Biddleford, Me.
- 246,881. COMMODE. — Duncan C. Hartman, Baltimore, Md.
- 246,885. REAMER. — Joseph H. Huber, Lancaster, Erie, Pa.
- 246,889. COMPOSITION FOR FILLING THE PORES OF WOOD. — Christopher H. Kuhn, Cincinnati, O.
- 246,894, 246,895, 246,896, 246,897, 246,898, 246,899. FIRE-EXTINGUISHER. — Charles M. Martin, New York, N.Y.
- 246,903. METAL-TURNING LATHE. — Thos. G. Morse, Pa.
- 246,904. BIT-STOCK. — Obed Peck, Rowe, Mass.
- 246,914. AUTOMATIC ELEVATOR-GATE. — Thomas Scholey, Teoria, Ill.
- 246,936. SASH-HOLDER. — Gustavus H. Barb, Denton, Tex.
- 246,938. ROCK-DRILLING MACHINE. — Milan C. Dulock, Chicago, Ill.
- 246,969. SAFETY DEVICE FOR ELEVATORS. — John H. McCarron, Cincinnati, O.
- 246,973. WASTE-PIPE COVER FOR SINKS. — Johannes Persson, New York, N.Y.
- 246,976. PIPE-WRENCH. — John F. Phillips, Georgetown, Col.
- 246,980. SAW-SET. — Edward Senn, New York, N.Y.
- 246,982. DOOR-SPRING. — Fred. W. Smith, Freeport, Ill.
- 246,985. PARLOR AND OTHER HEATING STOVES. — Edgar W. Anthony, Boston, Mass.
- 246,997. BRICK-KILN. — Daniel Ashbury and E. Nye Hutchinson, Charlotte, N.C.
- 247,027. SASH-CORD FASTENER. — Thos. P. Dunne and Paul Rath, New York, N.Y.
- 247,031. DRIER FOR PAINTS. — Alexander H. Everett, San Francisco, Cal.
- 247,040. HOT-WATER GENERATOR. — William W. Goodwin, Philadelphia, Pa.
- 247,044. STONE DRILL OR REAMER. — John Greek, Evansville, Ind.
- 247,050. HANGER FOR SUSPENDING BEAMS. — Lemuel M. Ham, Boston, Mass.
- 247,062. AUGER-HANDLE. — William A. Ives, New Haven, Conn.
- 247,106. REMOVABLE WOODEN THREAD FOR STONE STEPS. — Henry T. Pratt, New York, N.Y.
- 247,130. DOOR-KNOB. — Benjamin D. Stevens, Cambridge, Mass.
- 247,133. HYDRAULIC ELEVATOR AND HOIST. — Fernand Toussaint and Emile Heurtebise, Paris, France.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS. — Since the last report twenty-one permits have been granted, of which the following are the more important: —
Solomon McCabe, 3 brick dwellings, Wall St., between West and Ostend Sts.
J. B. Irvine, 3 three-story houses, Carey St., near Mulberry St.
J. B. Irvine, 3 brick dwellings, Mount St., south of Edmonson Ave.
Baltimore Chrome Works, brick building, 50' x 200', cor. of Dock and Wills Sts.
J. G. Mann, three-story brick building, Dallas St., between Aliceanna and Lancaster Sts.
Geo. C. Herlihan, 7 brick dwellings, Essex St., between Gist St. and Canton Ave.
S. T. Cromwell, 2 brick dwellings, Wayne St., near Warner St.
Edmund Dedier, 4 brick buildings, Watson St., between Exeter and Lloyd Sts.
Frank Eileman, 2 brick buildings, Castle St., between Monument and Madison Sts.
E. W. Haviland, 11 brick dwellings, Presstman St., commencing at s w cor. of Fressman and Stricker Sts.

Boston.

BUILDING PERMITS. — Brick. — Court St., cor. Court Sq., for Fifty Associates, hotel, 43' 6" x 100', seven-story flat; J. W. Colburn & Co., builders.
Wood. — Monument St., near Medford St., for William D. Haley, 6 dwellings, 20' 6" x 32', three-story; Wm. H. Haley, builder.
Hate Park Ave., rear of cor. Canterbury St., for D. Bianchetti, storage, 20' x 30'; W. L. Walker, builder.
Elm St., Orient Heights, for Enrich P. Botter, dwell., 18' x 23'; James H. Coffin, builder.
Clarence Pl., near Washington St., for Samuel Williams, stable, 24' x 30', two-story; Joshua H. Wilder, builder.
North Beacon St., rear of Lyman Ave., for James Shaughnessy, 2 dwellings, 16' 6" x 27'; Daniel M. O'Connell, builder.

AN EXHIBITION

— OF —

Architectural Drawings

— WILL BE HELD —

IN CONNECTION WITH THE FAIR

— OF THE —

Massachusetts Charitable Mechanic Association,

IN BOSTON,

During September and October, 1881.

ARCHITECTS IN EVERY PART OF THE COUNTRY

Are invited to contribute Designs to this Exhibition, and to forward their Contributions as soon as possible.

Drawings may be sent by mail, by express, prepaid, or by freight at reduced rates arranged by the officers of the association, to T. M. Clark, 178 Devonshire Street; Henry A. Turner, 31 West Street; John S. Damrell, City-Hall, or to the American Architect, 211 Tremont Street, Boston, Mass.

BUILDING INTELLIGENCE.

Brooklyn.

BUILDING PERMITS. — Fifth St., s s, 122' 10" e Fifth Ave., 32 three-story brick and brownstone dwellings, each, \$5,000; owner, C. B. Sheldon, 40 Wyckoff St.; architect, N. G. Foster; builder, Chas. Long.
Yerkes Ave., s s, 350 e Nostrand Ave., 3 two-story frame dwellings; cost, each, \$4,200; owner and builder, Thos. E. Greenland, 226 Kosciuszko St.; architect, J. D. Reynolds.
Central Ave., n w cor. Myrtle St., 2 three-story frame tenements; cost, \$9,000; owner, Peter Grimm, Central Ave.; architect, Geo. Hillenbrand; builders, Wm. Bayer and Sehey.
Wilder St., No. 83, s s, 100 w Leonard St., four-story frame tenement; cost, \$8,000; owner, Henry Bechtel, 107 Dover St., cor. Pearl St., New York; architect, Geo. Hillenbrand; builders, Wm. Bayer and J. Rueger.
Eighteenth St., No. 120, s s, 100 e Third Ave., two-story brick dwell.; cost, \$2,200; owner, E. F. T. Stender, 615 Third Ave.; architect, George W. Brandt; builders, Firth & Van Pelt and George W. Brandt.
Clinton Ave., e s, 46 s Fulton St., five-story brick flat; cost, \$14,000; owner, Thomas A. Wellwood; builder, J. Pearce.
Bremer St., e s, south of Prospect St., 6 three-story brick dwellings; cost, \$3,500 each; owner, C. Ritchie, 16 Court St.; architect, E. T. Hatch.

Buffalo.

DWELLING. — Brick dwell., for Mr. Magnus Weiner, North St., nr. the "Circle"; cost, \$25,000; architects, Holmes & Little.
STABLE for Mr. Daniel O'Day, a brick stable on North St., near Delaware Ave.; cost, \$10,000; architects, Holmes & Little.

Chicago.

BUILDING PERMITS. — C. Carpenter, 2 three-story brick stores and dwellings, 40' x 70', Madison St., near Paulina St.; cost, \$14,000.
W. B. Walker, two-story brick dwell., 42' x 70', 2025 Prairie Ave.; cost, \$30,000.
S. F. Norton, two-story brick dwellings, 20' x 34', Coblenz St., near Western Ave.; cost, \$2,400.
J. Schuster, three-story brick store and dwell., 24' x 60', 133 Larrabee St.; cost, \$8,000.
C. Miller, three-story brick dwell., 27' x 180', 2819 Michigan Ave.; cost, \$10,000.
H. M. Taylor, two-story brick dwellings, 22' x 32', Coblenz St., near Western Ave.; cost, \$2,400.
C. C. Marshall, three-story brick factory, 40' x 100', 44 Desplaines St.; cost, \$20,000.
C. Buck, one-story brick dwell., 22' x 40', 430 Centre Ave.; cost, \$2,500.
City, two-story brick engine-house, 24' x 104', Ogden Ave.; cost, \$10,500.
Murphy, Anthony & Co., one-story addition to boiler-shop, 20' x 100', Fulton St.; cost, \$2,000.
L. O. Goddard, two-story brick dwellings, 34' x 47', Lake Ave., near Thirty-sixth St.; cost, \$8,000.
F. Smuteck, two-story brick dwell., 21' x 54', 36 McHenry St.; cost, \$2,500.
J. M. Brunswick & Balke Co., five-story brick factory, 100' x 200', Market and Superior Sts.; cost, \$30,000.
S. Chase, two-story brick dwell., 21' x 62', 304 Sophia St.; cost, \$4,000.
W. St. L. & P. R. Co., additional story, 24' x 60', Twelfth St. and Third Ave.; cost, \$2,500.
R. Stevenson, three-story brick dwell., 25' x 56', La Salle Ave. and Schiller St.; cost, \$12,000.
G. H. Taylor, six-story brick building, 50' x 180', 140 Monroe St.; cost, \$125,000.
C. L. Hutchinson, three-story dwell., 30' x 60', 2709 Prairie Ave.; cost, 10,000.

BUILDING INTELLIGENCE.

H. Shell, two-story brick dwell., 24' x 66', 2638 Wentworth Ave.; cost, \$2,500.
McFarren, Levy & Co., one-story brick factory, 19' x 80', Indiana St. and La Salle Ave.; cost, \$3,500.
C. Kadowsky, two-story brick dwell., 20' x 54', Dickson St.; cost, \$3,000.
J. Soyk, two-story brick dwell., 25' x 56', 135 Nineteenth St.; cost, \$4,000.
C. Gottschalk, four-story brick malt-house, 59 Division St.; cost, \$12,000.
F. Lampke, two-story brick dwell., 21' x 66', 170 Dayton St.; cost, \$3,800.

Denver, Col.

BUILDING PERMITS issued since our last report: —
C. R. Gallup, two-story brick dwell., 23' x 74', Champa St.; cost, \$3,700; E. F. Fassett, architect.
D. G. Perrott, two-story brick dwell., 44' x 45', Tremont St.; cost, \$4,000.
J. M. Sticker, two-story brick dwell., 32' x 57', Eleventh St.; cost, \$5,700; E. Anthony, architect.
P. W. Barnes, one-story brick dwellings, each 20' x 25', Olive St.; cost, \$4,000.
Genl Albert Johnson, two-story brick dwell., 50' x 60', Sherman St.; cost, \$7,000.
E. O. Wolcott, two-story stone dwell.; cost, about \$14,000; F. E. Edbrooke, architect.
Jacob Schueler, three-story brick block, 25' x 76', Larimer St.; cost, \$16,000.
Adam Weber, two-story brick dwell., 32' x 63', Arapahoe St.; cost, \$5,500.
Smith & Pinkham, brick stable, 50' x 125', Lawrence St.; cost, \$8,000.
Mrs. Louisa Clough, two-story brick dwell., 32' x 48', Curtis St., between Twenty-eight and Twenty-ninth Sts.; cost, \$4,500.
Holladay St., two-story brick business house, 22' x 66', between Eleventh and Twelfth Sts.; cost, \$4,000.
Bishop J. P. Machebeuf, three-story brick dwell., 36' x 44', Stout St., between Fifteenth and Sixteenth Sts.; cost, \$9,000.
B. H. Baylis, two double brick dwellings, two-story each, 42' x 62', South Fifteenth St., between Capital and Olive Sts.; cost, \$15,000.
Charles Wheeler and Thomas Withers, two-story double brick dwell., 42' x 57', Champa St., between Eighteenth and Nineteenth Sts.; cost, \$8,000.
BREWERY. — Philip Zang & Co., three-story brick brewery, 91' x 155', Seventh and Water Sts.; cost, \$60,000; F. C. Eberly, architect.
HOSE-HOUSE. — Denver Fire Department, two-story brick hose-house, 25' x 76', Broadway; cost, \$10,050; Mr. Cutslaw, architect.
CITY-HALL. — New city-hall, four-story brick building, 100' x 250', stone basement and trimmings; cost, \$143,700; Nichols & Kauffman, architects; McPhee & McGinnity, general contractors.

New York.

BUILDING PERMITS. — Fifty-eighth St., Nos. 111, 113, 115 and 119 E., three-story brick and stone club-house; cost, \$100,000; owner, German Liederkranz, W. Steinway, president, East Fourteenth St.; architects, Wm. Kullies and H. J. Schwarzman.
One Hundred and Sixty-fifth St., n s, 84' e Grove Ave., 4 three-story brick dwellings; cost, each, \$3,000; architect, F. T. Camp; builders, A. B. Alexander and N. Hand & Son.
Broome St., n s, 22 e Elm St., seven-story brick factory; cost, \$75,000; owner, William C. Browning, 552 Fifth Ave.; architect, J. Hoffman; builder, Richard Deedes.
Church St., Nos. 212 and 214, five-story brick store and lofts; cost, \$25,000; owner, Jacob Gottgen, 30 Walker St.; architect, J. Hoffman.

(Continued on next page.)

THE AM

VOL. X.

OCTOBER

Entered at the Post Office

SUMMARY: —

The Broadway Underground New York. — Malaria Statements regarding ery, Ala. — Fireproof the Sorbome, Paris. — St. Gotthard Tunnel. — vate Names. . . .

BUILDING SUPERINTENDENCE

THE ILLUSTRATIONS: —

Boat-House, with Details.

— Drawing Tables. . . .

THE FAIR OF THE MASSACHUSETTS

CIATION. — II.

GENERAL RULES FOR THE U

THE KREMLIN, MOSCOW. . . .

EXPANSION AND CONTRACTION

COMMUNICATION: —

Some Minor Uses of Iron

NOTES AND CLIPPINGS. . . .

The building of the B seriously opposed by a num in New York, among oth and Grace Churches, the Lorillard, Spencer and W individuals. It is understood report on the expediency of road will report favorably trary are brought to their objectors was recently held properly presented. The n pated by the owners of the ing of their foundations by sandy portions of the route through the street is also ous to the interests of neig of the railroad profess to be without any material inte mining of cellar walls by middle of the street might but several of the speakers that none of the subscribed in, and that there might the company responsible in cas

A CHIMNEY at the corner New York, fell some four stances, killing a man who was delayed until last week. P. Esterbrook, Superintendent probable cause of the accid down, and the bricks and o the shaft, and in Mr. Ester the cylinder exerted a kind out the walls at the foot, and the Superintendent's cases an opening should be and planks placed in it to d side where it can be carried attention of all architects at mon than to see the most ca tion or treatment of walls w or permanently, to retain a terial. The best engineers great cost of good work of of their constructions to a f commit similar or worse er capacity.

The village of Schaghtico visited by malarial diseases struction of a railway emb the course of some small st stagnant pools. The town hills of the upper Hudson v nowned for its healthfulness been so violent as to affect

BUILDING INTELLIGENCE.

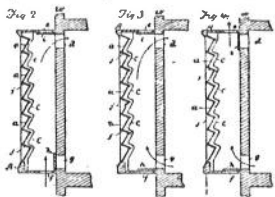
(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

246,626. WARMING AND VENTILATING APARTMENTS BY THE SUN'S RAYS.—Edward S. Morse, Salem, Mass. The invention consists in the employment of a casing attached to the outer wall of a building, and provided with a blackened surface of metal, earthenware, or other suitable material, having either a flat or corrugated surface protected by glass in front of the same, and so arranged as to allow the rays of the sun to fall as directly as practicable upon the blackened surface. Behind it is an inclosed air-space communicating by apertures at the upper and lower ends with corresponding openings of a room of a building, and also by separate openings with the outer atmosphere. The action of the sun's rays upon the blackened surface heats the air in the space, which heated air, as it ascends, may be directed into the room, so as to warm it, or it may serve to draw the air from the room, and thus ventilate it. A represents a casing attached to the outside of a house, or where it may be exposed to the sun's rays, *c c* represent a plate extending from the top to the bottom of the casing and presenting series of inclined surfaces, so arranged that the rays of the sun will fall upon them



to the greatest advantage. This plate has a blackened surface in front, and is composed of metal, earthenware, or other suitable material. In front of this blackened surface is arranged a series of glass strips, *a a*, parallel with the inclined portions *c c*, and set in sashes *j j*. At the top and bottom of the casing *a*, respectively, are openings *e* and *f*, and in the wall of the building, at the upper and lower ends of the casing, respectively, are apertures *d* and *g*. Between the opening and apertures *e* and *f*, and the opening *d* and *g*, are hinged the lids *h* and *i*, so arranged as to close either aperture above or below while the other is open. When a room is to be heated, the lid *h* at the bottom of the casing is opened, thus closing the aperture *g*, and the lid *i* at the top closes the opening *e*, leaving the aperture *d* open. The air passes into *f*, becomes warmed in its passage through the casing and enters the apartment at *d*. In Fig. 3 the openings *e* and *f* are shown as closed; the air entering the casing from the apartment, and passing through the casing, reenters the apartment, and so continuing the circulation and adding to the supply of heated air in the apartment. When ventilation only is required, the bottom opening *f* is closed by lid *i*, leaving aperture *g* open. Aperture *d* is then closed by lid *h*, leaving *e* open, as shown in Fig. 4. As the air becomes heated it passes up and out of opening *e*, drawing air all the time from the apartment through aperture *g*.

247,149. MACHINE FOR MORTISING DOORS FOR LOCKS.—Tyrre N. Andrews, San Francisco, Cal.
247,151. SASH-BALANCE.—Patrick H. Fox, Boston, Mass.
247,153. WOOD-WORKING TOOL-HANDLE.—James E. Green, Philadelphia, Pa.
247,152.—WELL AND ROCK DRILLING MACHINE.—Elias J. Hill, Findlay, Ohio.
247,210. WATER-CLOSET.—Edwin and Le Grand M. Norton, Chicago, Ill.
247,211. SCREW-CLAMP.—Elijah R. Osgood, Columbus, O.
247,226.—MAN-HOLE AND HAND-HOLE STOPPER.—Daniel Sullivan, Central Falls, R. I.
247,229. APPARATUS FOR LIGHTING DWELLINGS.—William Wheeler, Concord, Mass.
247,230. Holograph for lighting dwellings.—William Wheeler, Concord, Mass.
247,231.—APPARATUS FOR LIGHTING DWELLINGS.—William Wheeler, Concord, Mass.
247,233.—MACHINE FOR QUARRYING AND DRIPPING STONE.—Jos. Williams, Commercial Road, Liverpool, County of Lancashire, England.
247,234. COMPOSITION FOR PRESERVING WOOD.—Edward R. Andrews, New York, N. Y.
247,246. WINDOW-SCREEN.—John Forhan, New York, N. Y.
247,253. AIR-COOLING APPARATUS.—Ralph S. Jennings, Baltimore, Md.
247,262. ARTIFICIAL STONE, TILE, AND MARBLE.—Jno. W. McKnight, Washington, D. C.
247,271. METHOD OF MAKING LIME-BRICK.—Jacob Reese, Pittsburg, Pa.
247,273. DRAIN-PIPE CONNECTION AND PLEG FOR BATHS, ETC.—William Ricketts, Cincinnati, O.
247,282. REFLECTOR.—William Wheeler, Concord, Mass.
247,297. WASTE-WATER DISCHARGE FOR PORTABLE WASH-STANDS.—Nathan O. Bond, Fairfax Court-House, Va.

247,299. HEATING-FURNACE.—George R. Brown, Corning, N. Y.
247,310. SASH-HOLDER.—Charles D. Clark, Detroit, Mich.
247,328. MONKEY-WRENCH.—George T. Flanagan, Poughkeepsie, N. Y.
247,331. SKETCHING APPARATUS.—Richard D. Gallagher, Omaha, Neb.
247,340. SHUTTER.—Alexander H. Hill, Oskaloosa, Iowa.
247,253. CARPENTER'S SQUARE.—Jeremiah C. K. Howard, Edgerton, Mont.
247,361. TYPE-SUPPORTING HANGER.—Wm. Kane, Philadelphia, Pa.
247,370. METAL LATHING AND FURRING.—David W. Lloyd, Pittsburg, Pa.
247,372. GAS-HEATING APPARATUS.—Charles M. Langren, New York, N. Y.
247,386. DIP-PIPE.—George A. McIlhenny, Washington, D. C.
247,402. FAUCET.—John M. Peck, New Haven, Conn.
247,406. PIPE-TONGS.—Nathan Purdy, Fall Brook, Pa.
247,411-413. ELECTRIC BUGLAR-ALARM.—Henry C. Kosmos, Jersey City, N. J.
247,410. LADDER.—Edward Row, Indiana, Pa.
247,421. CONCRETE PAVEMENT.—John J. Schilling, New York, N. Y.
247,422. PROCESS OF COLORING AND GRADING WOOD.—Charles Schneider, Jersey City, N. J.
247,438. FIRE-BACK FOR MANTEL-GRADES.—John L. Treviser and William H. Loomis, Alameda, Cal.
247,440. SASH-FASTENER.—Isaac F. Turner, Troy, N. Y.
247,450. STOVE-PIPE THIMBLE.—Elbridge D. West, Canandaigua, N. Y.
247,468. SASH-FASTENER.—Willard D. Doremus, Washington, D. C.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—Since our last report twenty-three permits have been granted, of which the following have been selected as worthy of mention:—
J. Magens, three-story brick building, No. 570 Pennsylvania Ave., between Smith and Fisher Sts.; Denny & Mitchell, three-story brick building, 812 Baltimore St., between Carey and Republican Sts.; Valentine Sultan, three-story brick building, n. e. cor. of Fayette and Amity Sts.;
Congregational church, stone church-building, Eutaw St., between Dolphin and Hoffman Sts.;
Albert K. Hobbs, a two-story brick buildings, John St., 78' w. of Euter St.;
John H. Morrow, three-story brick buildings, York St., 105' e. of Sharp St.;
Wilson Sanitarium, five-story brick warehouse, 56 Hanover St., between Pratt and Lombard Sts.;
Strokers.—The two large warehouses on the n. e. cor. of Howard and Mulberry Sts., are being demolished by Mr. William Ferguson, and will be immediately replaced by three 20' front retail stores.
Houses.—Mr. Jacob Wahl has had drawings prepared for a three-story brick house, 18' 6" x 50' each, to be erected on Fairmount Ave.; cost, \$4,000 each.
Also, a three-story brick houses, 16' x 40' each, to be built on Irwin Pl., and cost about \$3,000 each; Mr. Wm. F. Weber, architect.

Boston.

BUILDING PERMITS.—*Brick*.—Commonwealth Ave., No. 285, for Henry S. Whitcomb, dwell., 20' x 62', three-story and mansard; Keeney & Fellows, builders.
Dartmouth St., rear of, near Columbus Ave., for Boston Tile Co., office, 40' x 66'; Vinal & Dodge, builders.
Purchase St., Nos. 54, 56, 58 and 60, for John Bassett, 2 mercantile buildings, 18' 2" x 50', three-story; Stevens & Bartlett, builders.
Liverpool St., No. 112, for E. Hodges & Co., engine-house, 16' x 20'; E. Hodges & Co.
Wood.—Rutherford Ave., near Allen St., for A. H. Allen, storage, 60' x 60', three-story.
South St., near Washington St., for Emma E. Gray, dwell., 23' x 28', two-story; Alexander Rogers, builder.
South St., opp. Walton St., for Arthur W. Roberts, dwell., 30' x 31', two-story; Alex. Rogers, builder.
Greene St., near Centre St., for Estate of Alex. Dickson, 2 dwells., 20' x 40', two-story; Jos. Hammerle, builder.
Warren Sq., for Estate Alex. Dickson, 2 dwells., 20' x 40', two-story; Jos. Hammerle, builder.
Dorchester Ave., rear of, near Blake St., for John Southern & Co., boiler-house, 30' x 45'; Jerome B. Keene, builder.
Trull St., near Hancock St., for Franklin King, dwell., 30' x 38' 7", two-story; Edw. McKechnie, builder.
Riverview St., near Adams St., for Ella F. Lapham, dwell., 16' x 25'; Elisha Lapham, builder.
Orchard Pl., near Boston St., for Wm. B. Trask, 2 dwells., 24' x 34', two-story and mansard; Wm. Eddie, builder.
Webster St., No. 259, for Mrs. Wm. D. Sheriffs, dwell., 21' x 32', two-story mansard; Frame & Patten, builders.
Elmore St., near Wilmont St., for New England Smelting Co., smelting-house, 25' x 60' and 25' x 70'; Wm. F. Wood, builder.
Emerson St., n. e. East Fourth St., for Thomas McDowell, greenhouse, 24' x 60'; Henry M. Elliot, builder.
Jolton St., No. 304, for Chas. H. Parker, dwell., 19' x 34', two-story; D. M. Morrill, builder.
1 St., near East Sixth St., for Locke & Nolan, 4 dwells., 19' x 32', two-story; Locke & Nolan, builders.
Sarin St., near Tupelo St., for B. S. Bennett, dwell., 27' x 29', two-story; B. S. Bennett, builder.
STORE.—A four-story building has just been started at the corner of Winter and Washington Sts. It will have stone fronts on both streets; owner, K. G. Rich

ards, Esq.; Louis Weissbach, architect; cost, \$17,000; J. W. Coburn & Co. and McKeuzie & Campbell, builders.

Brooklyn.

BUILDING PERMITS.—*Bleecker St.*, s. e. 400' e. Evergreen Ave., two-story frame dwell., cost, \$2,300; owner, M. E. Goodwin; architect, F. Webber; builders, J. Graham and J. Kessell.
Sixth Ave., w. e. cor. Carroll St., 5 four-story brownstone tenements; cost, \$6,000 each; owner, etc., Geo. W. Brown, 728 Fulton St.
Bainbridge St., n. s. 280' w. Patchen Ave., 3 two-story brownstone dwells.; cost, \$2,500 each; owner, etc., Robert Given, 55 Canton St.; mason, Edward Mullin.
Kosciusko St., s. e. cor. Throop Ave., three-story brick store and dwell., and 3 two-story brick dwells.; total cost, \$16,000; owner and builder, M. J. McLoughlin, 100 Kosciusko St.; architect, R. Ford.
Floyd St., n. s. 250' w. Broadway, 4 two-story frame dwells.; cost, \$2,500 each; owner, etc., Geo. Leffler, 82 Tompkins Ave.
Meeker Ave., n. e. 60' e. North Henry St., 2 three-story frame tenements; cost, \$3,600; owner, H. Blin-din, Meeker Ave.; builder, John Hoepfer.
Jackson Ave., s. e. cor. Old Bushwick Ave., three-story brick store and tenement; cost, \$5,500; owner, Franz Brendel, on premises; architect, George Hillenbrand; builder, Franz Brendel.
Fifth Ave., s. w. cor. Prospect Ave., three-story brick store and dwell.; cost, \$5,000; owner, Harriet Ingram, 752 Fifth Ave.; architect, George Ingraham; builder, Wm. Corrigan.
Union Ave., cor. Anselme St., 2 one-and-two-story brick factories; cost, \$12,000; owner, Wm. Cable Excelsior Wire Manufacturing Co., 43 Fulton St.; architects, Paritt Bros.; builders, Stephen J. Burrows and Oscar H. Doolittle.
Park Ave., Nos. 675 and 678, 275' e. Marey Ave., 3 two-story frame dwells.; total cost, \$6,500; owner, F. Miller, cor. Leavitt Ave. and Hart St.; architect, T. Engelhardt; builders, Sachs & Smendinger and John Rueger.

Chicago.

BUILDING PERMITS.—F. Schneider, two-story brick dwell., 22' x 40', Seminary Ave., near Webster St.; cost, \$2,500.
J. H. Little, two-story brick dwell., 25' x 64', 629 West Adams St.; cost, \$8,000.
C. & N. W. Railway Co., two-story brick freight-house, 40' x 410', Kinzie and Water Sts.; cost, \$30,000.
C. Seipp, ice-house, 84' x 144', 2222 Ingelhart St.; cost, \$30,000.
F. Alckter, two-story brick dwell., 20' x 32', 2814 Church St.; cost, \$3,000.
Mrs. — Troost, two-story brick dwell., 20' x 50', 34 Montana St.; cost, \$2,300.
J. V. Conroy, 2 three-story brick stores and dwells., 40' x 70', 407 State St.; cost, \$5,000.
E. A. Holroyd, two-story brick dwell., 22' x 55', 440 Warren Ave.; cost, \$3,800.
Wordell & Hinkley, two-story brick factory, 60' x 90', Loomis and Taylor Sts.; cost, \$5,500.
M. Kranz, two-story brick dwell., 22' x 47', 40 Evergreen St.; cost, \$4,000.
Curran & Wolff, 8 two-story brick dwells., 65' x 145', Calumet Ave. and Twenty-second St.; cost, \$20,000.
M. Bartodien, two-story brick dwell., 22' x 60', Eighteenth St., near Paulina St.; cost, \$3,700.
C. E. Baker, two-story brick dwell., 22' x 57', Indiana Ave., near Thirty-fifth St.; cost, \$6,000.
Johanna Weber, two-story front addition, 20' x 26', 18 Wesson St.; cost, \$12,000.
E. A. Lancaster, two-story dwell., 30' x 60', 2703 Parmelee Ave.; cost, 10,000.
J. Kenny, one-story dwell., 20' x 40', Emerald Ave., near Thirty-third St.; cost, \$8,000.
ADDITION.—The Moran Building on Washington St., by Dearborn, is having two stories added to it, or rather inserted. It is already one of the highest buildings in the city.
HOTEL.—A new hotel on the European plan is to be built by the owner of Burke's Hotel, Mr. William McCoy, on lots 8 and 9 in block 115, in the school section. It is on Clark St., east front, 100' of Jackson, and is 30' x 213', running through from Clark St. to Pacific Ave.

Louisville, Ky.

BUILDING PERMITS.—Of the building permits issued since last report, the following are those of importance:—
L. & N. R. Co., foundation for brick depot; cost, \$6,000; H. Wolters, architect.
Wittelsheiser & Peckel, brick store and dwell.; cost, \$7,500; W. H. Redin, architect.
Geo. Freischner, brick dwell.; cost, \$9,000; C. D. Meyer, architect.
Catherine Keisker, brick store and dwell.; cost, \$5,000; Chas. D. Meyer, architect.
H. Israel, brick dwell.; cost, \$2,500; Charles D. Meyer, architect.
Edward Fulton, brick store and dwell.; cost, \$7,500; C. A. Curtin, architect.
H. V. Loring, brick dwell.; cost, \$6,000; H. P. McDonald & Bro., architects.
Thomas Shanks, brick office; cost, \$2,700.
C. G. Maltby, brick dwell.; cost, \$3,500.

New York.

BUILDING PERMITS.—*Sydenham Pl.*, s. w. cor. One Hundred and Twenty-first St., two-story brick stable and office; cost, \$5,000; owner, Frank Beattie, 202 West Forty-third St.; architect, D. J. Marshall.
East Fifty-ninth St., Nos. 420 and 422, four-story brick tenement; cost, \$12,000; owner, A. Kreisheimer, 420 East Fifty-ninth St.; architect, F. T. Camp.
Alexander Ave., n. o. cor. One Hundred and Thirty-fifth St., four-story brick store and tenement; cost, \$10,000; owner, Mary Dugan, 107 Alexander Ave.; architect, John Rogers; builder, Jas. O'Kane.
One Hundred and Nineteenth St., n. s. 22' w. Lexington Ave., 4 four-story brick apartment-houses; cost, each \$25,000; owner, Matthew Van de Water, 2238 Second Ave.; architect, Chas. Baxter.

(Continued on next page.)

SUMMARY:—
Village Hospitals suitable M
The Plumbing Regulation
of the Cincinnati Iron Str
Elevator, Philadelphia.—
in New York.—The In
about the Zuni Indians.
Architects: a Legal Case.
THE NEW TURKISH MUSEUM
of A NEW HISTORY OF ART.
THE FAIR OF THE MASSACHU
CLATION.—IV.
THE ILLUSTRATIONS:—
The Yorktown Monument,
memorative of the Constitu
Kirche at Treves.
LEGAL NOTES AND CASES.
FOURTH COMPETITION IN INTER
VERDICT ON THE DENVER BUILD
THE NEW PLUMBING REGULATIO
DEPRECIATION OF A DEMESSE IN
THE MOSAICS IN THE CATHEDR
COMMUNICATIONS:—
Suggestions for the Paterson
Taupstry.
NOTES AND CLIPPINGS.

AMONG the innumerable p
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the most popular one appea
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kind. Whatever the Americ
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kept quite as much in mind
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cottage-hospitals, which, scat
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population is often crowded
would hardly be tolerated in
some such public charity is u
remoter country districts a c
instances where whole famili
breaks of contagious diseas
to a single case, if means of
had been available. The
simple and inexpensive. A
carefully heated and ventila
nurse or two, and a modest
would do far more in any
inhabitants to restore the sig
from needless attacks of di
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tion of a huge city or State
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proper, and although the fir
its way, some new rules and
been added. Among these i
pipes should be placed in a
half feet square, extending
light with louvered ventila
the shaft at every story, and
floor, to stand on in case of

allow as closely as possible the outlines of the original mosaics. The changes made are as the omission of the seats of the figures were represented standing, must in an ungraceful and monotonous effect. The execution of the designs was entrusted to whom our readers have often heard. The designs seem agreed as to the success of the design united with brilliancy of color. From the octagonal construction the light being thrown upwards from the center, is heightened in a singularly effective quality with which the work has been a suitability of Salvati's process for the time we consider that the space covered by the time occupied seems relatively small within two years, we note, although it is three years. This rapidity is only of material, financial, and technical progress. In the different processes of manufacture, most recent improvements; but the process is in a process described at some

ing mosaic work was to cover the wall with cement, and insert the pieces separately. The operation at Rome) only allows two at any one time, if due regard be given. The Salvati process consists in the use of the design amongst different workers. The design is pasted on paper, the words, and thus when being placed in the separate sheets and fix them to the paper from the face of the mosaic. Apart from the advantage of the uniformity and regularity of the mosaic work) are much more easily than each block has to be fixed separately. The labor allows of a proportionate system as compared with that of the

question of durability to be glanced at, that although some of Salvati's process they are as firm as when the testimony of the late Sir Gilbert was in support of this assertion, under his direction, such as the Wolbert Memorial, etc.

aining portions of the octagon should be. Its present undecorated state is produced by the mosaics overhead but to make the rest of the Emperor's dome. According to the *Echo* been enriched by a noble work which not also the artistic requirements of this offers a new inducement to art-visit." — *The Builder*.

E. PATERSON, N. J., WATER-PLY.

St. Louis, Sept. 26, 1881.

AMERICAN ARCHITECT:—Our correspondent that the people of St. Louis annually from a deficiency in their relief and at very slight expense by for many or all domestic purposes, in-water shed by an ordinary dwelling amply sufficient for all the wants of properly constructed cisterns, and care into the sewer till the roofs are in a supply of palatable and healthful could be that it could not be used in about being pumped into a tank, with not provided, and that people who wish to be deprived of it at any time. It gives a suggestive description of ex- to be filled by surface drainage. A town was so successful that another the fire-department of the neighbor- of water-supply for fire protection, rocks each, and two of 2000 barrels was impossible to fill them from roofs, water, and an ample supply quickly and to have a completely satis-

respectfully ILLSLEY.

TAPESTRY.

DES MOINES, IOWA, September 22, 1881.

AMERICAN ARCHITECT:—Any ideas in regard to tapestry deco- ways ing it, whether tufted

or hung from a rod; in fact, anything you can tell us of it, or where we can learn of the art, will be greatly appreciated by us, and many thanks to you for the same.

Yours truly,

REDHEAD, WELLSLAGER & CO.

[Such materials are sometimes put on in plaited panels drawn up to knots in the centre, but the usual way is to fasten strips of wood, two inches wide and five-eighths inch or so thick around the top of the room and above the base-board or wainscoting, with vertical strips of the same kind at the angles, and spaced along the wall so that one shall come at each seam of the cloth, and the breadths of tapestry or damask are then sewed together, edge to edge, with great care, and tacked to the strips. A line of gimp or other finish is run around the top and bottom. The thinner the strips to which the stuff is tacked, the better the surface will arrange with the base or other mouldings, but the cloth must always be stretched clear of the plaster. — *EDS. AMERICAN ARCHITECT.*]

NOTES AND CLIPPINGS.

PAPERHANGING ON DAMP WALLS.—A mode of hanging paper on damp walls has been patented in Germany. Lining-paper, coated on one side with a solution of shellac in spirit of somewhat greater consistency than ordinary French polish, is hung with the side thus treated towards the damp wall. The paperhanging is then proceeded with, in the usual way, with paste. Any other kind of resin easily soluble in spirit may be used in place of shellac. A layer of paper thus saturated with resin is said to be equally effectual in preventing the penetration of damp. It is not stated how long lining-paper prepared in the manner described will adhere to a damp wall. As far as we are aware, French polish peels off moist surfaces, or is decomposed by damp. However, the suggestion with regard to the new process remains a matter for speculation, and experience alone will solve the question. For this reason, it is worth while, in our damp climate, to try the experiment.

A BOTTOMLESS PEAT-BED.—On the extension of the New England Road from Brewster's to the Hudson there is one of those peat-beds like the one which, near Wallingford, has caused the Consolidated Road so much trouble. This one west of Brewster's required over 600 car-loads of earth to fill it before a foundation could be laid for the abutments of a bridge across the shallow pond. For this structure piles, one upon another, have been driven 110 feet into the peat, and the longest goes down 114 feet below the surface. A 3,000-pound weight has been used in driving them, and, at the last fall of this immense hammer, a fall of 20 or 30 feet would drive the piles only half an inch, so great was the friction on the sides of the piles. As it was, bottom was not reached after all; the friction on the piles sustains them. Some 70,000 or 80,000 cubic yards of earth have been dumped into this pit. — *Hartford (Conn.) Times.*

FIRE IN ST. LOUIS AND CHICAGO.—Whipple's *Fire Reporter* prints the following comparative statement of fires in Chicago and St. Louis for the first eight months of this year. Chicago has a population, by last census, of 503,304; St. Louis, 350,522:

TOTAL LOSSES AND INSURANCE FOR EIGHT MONTHS.

	Loss.	Insurance.	Loss to In-
St. Louis.	\$1,383,807.14	\$2,394,972.49	\$1,656,363.25
Chicago.	457,997.59	5,540,574.99	393,251.85

DOUBLE-GLAZING.—A writer in the *English Mechanic* points out some of the advantages of double-glazing in promoting the health of homes in winter. Skylights, he says, ought never to be put up unless double or double-glazed. Double-glazing answers perfectly if the sashes are grooved out for glass on each side, and are then glazed with an airspace of one half-inch or more between the panes of glass. The glass must be put in with its inner faces perfectly bright and clean, and the glazing should be done on a cold, dry day, so as not to include watery vapor, which in cold weather will condense inside the air-space, and cause mistiness. This double-glazing with an air-space makes a window almost as warm as a brick wall, and not only keeps up the temperature of a room in winter, and saves fuel, but it keeps the room cool in hot weather, and it makes the temperature more uniform throughout the apartment. With ordinary thin glazing in winter, the inmates are always being chilled on that side which looks toward the window, and baked on that side which is toward the fire. Double-glazing our window sashes would save all this trouble.

THE CEDARS OF LEBANON.—The cedars of Lebanon have of late years suffered much from the destructive tendencies of visitors. The Governor-General of the Lebanon has therefore laid down certain regulations for the protection of the cedar-grove of Becherré, and appointed a custodian to see that the rules are enforced. A wall has been built around the cedar-grove, and although the cedars will be accessible to all travellers wishing to visit them, the erection of tents and establishment of encampments will not be permitted within this enclosure, except in such places as may be pointed out by the guard. No fires may be lighted in the vicinity of the trees, and all cooking operations must be carried on outside the enclosure. The observance of this precaution is all the more necessary, as three of the largest cedars were recently destroyed by fire, through the carelessness of servants attached to the suites of travellers. It is absolutely prohibited to cut branches or sprigs either for local use or for carrying away. The horses and mules of travellers will not be allowed to remain within the enclosure; while other animals, such as oxen, cows, goats, sheep, etc., are not to enter under any pretext, and will be impounded if found trespassing. The interpreters and muletiers of travellers will be held responsible for the infraction of any of these rules, which the natives also are expected to observe. By these judicious steps it is hoped that the famous cedars will be preserved from destruction. — *St. James's Gazette.*

PICTURE OF COLUMBUS.—The picture of Columbus just found in the Spanish Colonial Office represents him as about forty, without a wrinkle on his broad forehead, with dark, thick hair, a brilliant eye and beaked nose.

THE FORTIFICATIONS OF ROME.—Not only are most strenuous efforts being made at the present moment to complete the defensive works already in course of construction round Rome, but it has also been lately decided largely to extend the system of fortifications designed in 1878 for the defence of the city. In that year four million lire were voted for the construction of forts on the southwestern, eastern, and northeastern fronts of Rome; but these works were not intended to form an entrenched camp or pivot for strategical operations, such as, for instance, has been created round Paris since the conclusion of the late Franco-German war, but were designed solely to secure the capital against capture by a sudden and unexpected attack, and enable it to hold out until a field army sufficient for its defence could be concentrated. Recent events have, however, determined the military authorities to now give a far greater development and strength than was originally intended to the defences on the right bank of the Tiber. In the neighborhood of Rome this latter runs in a nearly due north to south direction, and the ground on its right bank being considerably higher than that on the left, completely commands the town of Rome. To render the capital secure, it is therefore essential that the right bank of the river should be strongly fortified; and a scheme for this purpose has now been approved. The character of the country in front of the grille of forts will, it is anticipated, prove extremely advantageous to the defenders, since it is a treeless, sparsely populated and malaria-stricken waste, which will offer little cover or shelter to an attacking force. The roads, moreover, traversing the Campagna all radiate from Rome, and will therefore facilitate the operations of the defenders, while the absence of lateral communication in advance of the fortifications will greatly inconvenience an attacker. — *St. James's Gazette.*

TESTS FOR STONES.—For purposes of the engineer, or in geological surveying, the physical character of a rock is of value. There are a few tests which it may be necessary to have recourse to. Mr. W. H. Penning, F. G. S., says: "To ascertain the kind of rock exposed in a pit or quarry, a fragment is detached from that part which has been least altered by the action of the weather. A good-sized piece of the rock is broken off, and afterwards reduced by chipping into a square lump. Good edges are thus obtained for observation of its texture by the aid of a pocket-lens." Scratching is a tolerably good means of testing hardness, and the young architect or geological student might examine the hardness of the stones in any locality with the aid of his pocket-knife. Those which are easily scratched, effervesce rapidly by dilute hydrochloric acid; and generally the degree of durability of a stone may be ascertained by the rapidity or slowness of effervescence. Calcite, or carbonate of lime, limestones, etc., are easily scratched and effervesce rapidly under acid. Magnesian limestone and dolomite do not effervesce quickly, and many sorts of stone, like gypsum sandstone, do not effervesce at all. Other important tests may be resorted to if additional information be required, and the texture and color are important for the architect. Texture is discovered by chipping an angle, and this may be crystalline, earthy, fibrous, granular, or compact. The behavior of a stone before the blowpipe is another valuable test: some stones reduce to quicklime, as those in which carbonate of lime is the chief constituent; others are fusible more or less, and some yield copper, lead, glass, slags, etc. It would be as well if these simple means of testing were more generally known and exercised in the selection of building-stones. — *The Building News.*

STRAPONTIN SEATS.—The recent attempt to enforce new regulations against fire in the Paris theatres resulted in little more than an increase in the quantity of water kept on the roofs in tanks for the use, in case of need, of the official fireman. Something like a revolt of the managers appears to have been aroused by the prohibition of what are known as "strapontin" seats, and it is said that in certain theatres these obstructions have, by way of defiance, been actually increased in number. The "strapontins," as the word indicates, are seats forming a sort of bridge across a gangway, thus making the lines of seats continuous. They were adopted at the Gaiety Theatre when the great demand for places to witness the performance of the "Comédie Française" offered a temptation to increase the amount of accommodation by such means; but their introduction was speedily followed by an order for their removal from the Lord Chamberlain's Office. As these extra seats were probably adding to the receipts on that occasion nearly £200 a week, it is easy to understand their popularity with managers in prosperous times. In defence of them it is urged that, as they are always provided with a spring which compels them to fly up and stand erect when not sat upon, they do not practically form any obstruction; but it cannot be denied that they cause annoyance to visitors, who are not able to pass to and from their seats without requesting the occupants of "strapontins" to rise. For the rest, their dangers are probably exaggerated. Some time since, when an ingenious American was reported to have invented "anti-panic seats," which would instantly disappear upon an audience rising "en masse," it was sensibly observed that in the case of a panic very little would be gained by enabling the entire audience to precipitate itself instantly upon one or two narrow exits. — *London Daily News.*

TALKING A HOLE THROUGH A DEAL BOARD.—One day at Menlo Park Mr. Edison had been showing his phonographs and telephones to a friend, who at last remarked, in a kind of despair, "Mr. Edison, you had better invent a machine to talk a hole through a deal board." In a week the machine was complete, and may now be seen in the exhibition. It consists of a mouth-piece, with a diaphragm across it, to the centre of which a light steel rod with a ratchet at the end is attached. On being sung to, the diaphragm and the rod vibrate rapidly, and the ratchet, gearing into a little cog-wheel, causes it to revolve. The axle of the cog-wheel carries a minute drill. Many inventors may have had as many brilliant ideas—few have carried out so many in actual practical form. The secret of Mr. Edison's success in this direction may be summed up in his own words: "Whenever by theory, analogy, and calculation I have satisfied myself that the result I desire is impossible, I am then sure that I am on the verge of a discovery." — *The Athenaeum.*

BUILDING INTELLIGENCE.

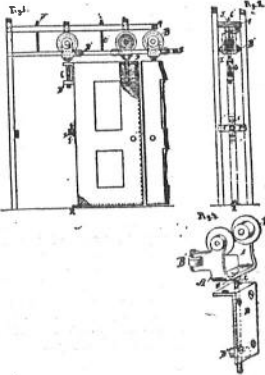
(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

240,285. DOOR-HANGER. — Caleb Brinton, Chicago, Ill. The bracket A, having vertical and horizontal arms, with wheels B and rolls B', suspension-rod C, with the angular attaching-plates D, having lug D', Fig. 4, constitute the hanger. The square-sided single track E is secured to hanger F, which itself is secured rigidly to and forms part of the building. The track E can be raised or lowered, as may be desired, by means of nuts. The suspension-rod C are threaded upon the lower end, so as to be turned into corresponding threads in part D' of plate D, by which the doors are suspended and adjusted. The recess in the lug H on the underside of the bracket A is elliptical in form, which admits of an oscillating motion of the bracket A on a line with the axes of wheels B, thus allowing adaptation of the wheels to any irregularity of the track. The rolls B' serve to keep the axes of the flanged wheels B at right angles to the longitudinal line of the track E. The angular plates D are secured to the top and front edges of the doors, to



which the suspension-rod C are adjusted. A single wheel, with or without flanges, may be used in place of wheels B. If the flanges are omitted, the wheel can travel upon a way or within a groove under the under side of said track. The guide R at bottom of door, Figs. 1 and 2, is secured to floor even with the side of the door-lamb, and fits into the groove in the bottom of the door. In the construction of the hangers, hard-wood track and iron wheels are used, with their axle-bearings bushed with anti-friction metal. It will be observed that the carriages act independently of each other, and that the track is single and made with the least waste of material. The doorway is clear of obstructions and the appendages out of sight. The door can be readily adjusted at any time to conform to any irregularity of the frame or floor.

247,735. COMBINED WEATHER-STRIP AND BURGLAR-PROOF LOCK FOR DOORS. — John M. Applegate, Norwalk, Mo.

247,737. ELECTRIC GAS-LIGHTING APPARATUS. — George D. Bancroft, Boston, Mass.

247,738. MULTI-WAY COOK. — Alexander Pye and Thos. Rawson, Paterson, N. J.

247,764. SCREW-CUTTING LATHE. — Andrew Hyde, Hatfield, Mass.

247,765. MACHINERY FOR THE EXCAVATING AND CONSTRUCTION OF SEWERS. — Jno. H. Schenck, New York, N. Y., and Sydney Maltby, Washington, D. C.

247,766. WEATHER-STRIP. — William H. Tapper, Alder, Neb.

247,768. WOOD-PLANING MACHINE. — Asa K. Wells, San Francisco, Cal.

247,769. WATER-CLOSET VALVE. — Peter White, St. Louis, Mo.

247,791. LUMBER-TRIMMING MACHINE. — Alfred Williams, Moline, Ill.

247,801. FIRE-ESCAPE. — Rudolphus S. Dashiell, Greensborough, N. C.

247,828. WATER-CLOSET FIXTURE. — John H. Jennings, New Bedford, Mass.

247,854. HEATING-DRUM. — Dexter M. Small, Providence, R. I.

247,855. FILTER. — Julius Wodaska, New York, N. Y.

247,856. METAL-ROOFING. — Jno. B. Casley, Coolville, O.

247,894. BENCH-DOG. — John M. Doyle, North Springfield, Mo.

247,933. SQUARE ATTACHMENT FOR SAW-BLADES. — Thos. U. McKee, Poughkeepsie, N. Y.

247,947. APPARATUS FOR TREATING TIMBER FOR PRESERVING IT. — Joseph W. Putnam, New Orleans, La.

247,956. LOCKING-LATCH. — Edward Snyder and Israel Adams, Worcester, Mass.

247,956. METHOD OF ORNAMENTING WOOD. — Albert Thallheimer, Reading, Pa.

247,987. CHAIN-WRESCHE. — William H. Brock, Corvallis, N. Y.

247,986. TILK FOR ILLUMINATING PURPOSES. — James G. Pennycook, Boston, Mass.

248,007. SMOKE-CONSUMING FURNACE. — Alfred Berner, Boston, Mass.

248,011. COMPOUND FOR RENOVATING BRICK SURFACES. — Frederick J. Berry, Boston, Mass.

248,044. COMBINED STEP AND EXTENSION LADDER. — C. A. Boardman, Boardman, Wis.

248,045. FLOOR-CLAMP. — John A. Brown, Marlborough, Mass.

248,046. HOT-AIR FURNACE. — Abner H. Brown, Royer's Ford, Pa.

248,025. LIFTING-LATCH. — Francis Clymer, Galton, O.

248,028. MEANS FOR OPERATING STAGE-SCENERY. — John Crossy, Philadelphia, Pa.

248,029. COMPOSITION FOR FILLING THE PORES OF WOOD. — Frank Donnet, Gallipolis, O.

248,038. AUTOMATIC FIRE-EXTINGUISHER. — Alphonse S. Harth, Chelsea, Mass.

248,045. HAND-SAW. — Lewis Lawson, New York, N. Y.

248,049. HEATING-DRUM. — August Meyer, Fort Washington, Wis.

248,072-075. COMPOSITION FOR ROOFING AND PAVING. — Cyrus M. Warren, Brookline, Mass.

248,076. BASIN-WASTE. — Henry M. Weaver, Mansfield, O.

248,092. VENTILATOR. — Christian A. Fredericks, Brooklyn, N. Y.

248,094. FIRE-PROOF COMPOSITION. — Charles C. Gilman, Hardin County, Iowa.

248,128. SHUTTER-FASTENER. — Henry B. Ayer, New Orleans, La.

248,141. HEATING FURNACE. — Benj. D. Childrey, Philadelphia, Pa.

248,150. SAFETY DEVICE FOR ELEVATORS. — Albert C. Ellithorpe, Chicago, Ill.

248,160. APPARATUS FOR THE OBOLEUS EMPTYING OF SINKS, SINKS, ETC. — Urban Giesenbruggler, Vienna, Austria.

248,164. SCREW. — Hayward A. Harvey, Orange, N. J.

248,207. VENTILATOR. — Joseph Patchett, Lawrence, Mass.

248,216. REMOVING HOUSE-SEWAGE AND VENTILATING THE PIPES THEREFOR. — Henry Reese, Baltimore, Md.

248,233. FIRE-EXTINGUISHER. — Albert M. Burritt and Lewis D. Castle, Waterbury, Conn.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS. — During the past week thirteen permits have been granted, of which only the following deserve special notice:

K. Walpmann, 4 three-story brick buildings, Chew St., bet. Hand St. and Broadway.

W. H. Wehn, 4 three-story brick buildings, s e cor. Mount and Lexington Sts.

W. H. Wehn, 2 three-story brick buildings, east side Mount St., in rear of buildings mentioned in above permit.

Chr. Otto, to rebuild and alter hall, south side of Haw St., 100' east of Fremont St., into 3 two-story buildings.

Boston.

BUILDING PERMITS. — Brick. — Hancock St., near Stoughton St., for Micah Dyer, Jr., family hotel, 59' x 74', four-story mansard; Sampson, Clark & Co., builders.

Water St., opposite Joiner St., for Hoosac Tunnel Dock and Elevator Co., engine-house, 28' x 50'; Charles R. McLean, builder.

Marlborough St., near Exeter St., for C. J. Blake, dwell., 22' 6" x 32', four-story mansard; J. H. Kelly and McKenzie & Campbell, builders.

Newbury St., near Gloucester St., for W. W. Lewis, dwell., 16' 6" x 57', three-story; Woodbury & Leighton, builders.

Newbury St., near Gloucester St., for A. T. Lowe, dwell., 16' 6" x 57', three-story; Woodbury & Leighton, builders.

Commonwealth Ave., Nos. 228 and 230, for Chas. W. Parker, 2 dwells., 20' x 60', two-story mansard; L. P. Soule, builder.

Water St., opposite Joiner St., for Hoosac Dock and Elevator Co., boiler-house, 34' x 70'; Charles R. McLean.

Beacon St., Nos. 333, 335 and 337, for Samuel T. Ames, 3 dwells., 22' x 48', three-story.

Wood. — Cedar St., near Terrace St., for James W. Kenney, stable, 25' x 62', two-story.

Hoffman St., cor. Gilbert St., for Michael Mitchell, dwell., 28' x 34' 6", two-story; John L. Dakin, builder.

George St., near Magazine St., for Maximilian Kaiser, 32' x 32', two-story; F. J. Fortunate, builder.

Washington St., near Blue Hill Ave., for Geo. L. Gardner, dwell., 37' 6" x 38', two-story; Milton H. Howard, builder.

Parkman St., near Adams St., for J. Lodge Eddy, dwell., 20' x 27', two-story; Studley Bros., builders.

Hancock St., rear of, near Downer St., for Wm. Hendry, 2 dwells., 18' x 28', two-story; John Quirk, builder.

Olney Street Pl., near Olney St., for Thomas A. Cox, greenhouse, 10' x 97'; Rob. M. Lapham, builder.

Pranger St., near Ashbur St., for Oliver Dison and John H. Robinson, 2 dwells., 26' x 36', two-story hip; C. H. Wetmore, builder.

Brooklyn.

BUILDING PERMITS. — Herkimer St., s s, 40' w Ulton Ave., 2 two-story brick dwells.; cost, each \$4,000; owners, Kenyon & Newton, 528 Union St.; architect and carpenter, Theo. Pearson; mason, C. Beigel.

Partridge St., s s, 200' e Conover St., four-story brick store and tenement; cost, \$8,000; owner, Henry Dohman, 134 Partridge St.; builder, C. M. Detlefsen.

Madison St., s s, midway between Clason and Franklin Aves., two-story brick stable and dwell.; cost, \$4,500; owner, A. W. Pollard, 73 Monroe St.; architect, W. H. Burbanck.

Monroe St., Nos. 140 and 142, being 140' e Bedford Ave., 2 three-story stone dwells.; cost, \$5,500; owner and builder, L. W. Seamans, Jr., De Kalb Ave. and Fort Green Pl.

Third Pl., s s, 75' w Smith St., 4 three-story brick tenements; cost, total, \$16,500; owner, architect and builder, Wm. Taylor, 83 Third Pl.

Penn St., s s, 100' w Harrison Ave., 2 two-story brownstone dwells.; cost, about \$4,500 each; owners, John F. Saddington & Bro., 201 Halsey St.; architect, G. W. Casey, builder, F. B. Saddington.

ALTERATIONS. — Washington Ave., No. 251, two-story brick extension; cost, about \$7,000; owner, Geo. C. Martin, on premises; builder, W. H. Hazard.

Chicago.

BUILDING PERMITS. — G. A. Bush, two-story brick dwell., 22' x 66', La Salle Ave., near Chestnut St.; cost, \$10,000.

J. Cosmarck, two-story brick dwell., 21' x 56', 741 Van Horn St.; cost, \$30,000.

G. W. Mercham, two-story brick dwell., 40' x 50', 391 Dayton St.; cost, \$5,000.

A. J. Gross, 2 two-story brick dwell., 35' x 42', 224 Wilmet St.; cost, \$6,000.

C. Anderson, two-story brick dwell., 21' x 42', Center St., near Halsted St.; cost, \$5,000.

Hunter & Scott, three-story brick store and dwell., 23' x 62', 133 Fourth Ave.; cost, \$5,000.

M. Heppacher, one-story brick dwell., 20' x 30', Lewis Ave.; cost, \$2,000.

E. C. Mack, two-story brick dwell., 20' x 30', 3515 Lowe Ave.; cost, \$4,000.

G. A. Seaver, elevator, 85' x 183'; Twenty-second St. and river; cost, \$25,000.

Hiss Hooker, two-story brick dwell., 24' x 33', 733 Jackson St.; cost, \$4,000.

H. L. Parmelee, two-story brick dwell., 23' 4" x 51', 20 Uden Pl.; cost, \$3,500.

E. C. McLeod, 2 two-story dwells., 40' x 45', 228 Park Ave.; cost, \$9,000.

F. Weising, two-story brick dwell., 28' x 42', 702 West Twenty-second St.; cost, \$2,800.

D. Murphy, two-story brick dwell., 24' x 38', 262 Oak St.; cost, \$3,500.

F. Seibel, two-story brick dwell., 24' x 6, 217 Orchard St.; cost, \$28,000.

C. Fischer, two-story brick dwell., 21' x 46', Dayton St., near Lincoln Ave.; cost, \$2,500.

C. A. Blaurock, two-story brick dwell., 46' x 46', Leavitt St., near Harrison St.; cost, \$4,500.

L. F. Williams, two-story brick dwell., 19' x 61', 627 Sedgwick St.; cost, \$6,000.

F. Walpole, three-story brick dwell., 25' x 38', 27 Lincoln St.; cost, \$8,000.

J. Scott, two-story brick dwell., 20' x 42', 636 West Twelfth St.; cost, \$2,800.

Stark, two-story brick dwell., 24' x 66', 307 Hubbard St.; cost, \$4,000.

S. Bolling Stock Company, one-story addition to factory, 88' x 100', Hoyne St., near river; cost, \$6,000.

W. Garvey, three-story brick factory, 76' x 126', Evans St. and Blue Island Ave.; cost, \$11,000.

Paula Varney, three-story brick dwell., 20' x 40', 362 Ohio St.; cost, \$4,000.

A. Brevett, two-story and basement brick dwell., 25' x 40', Garfield Ave., near Clark St.; cost, \$3,500.

F. D. Reynolds, 3 two-story brick dwells., 42' x 46', 3730 Johnson Pl.; cost, \$5,000.

C. H. Durand, one-and-a-half-story brick barn, 50' x 62', Twenty-second St. and the Lake; cost, \$3,500.

G. W. Brayton, 2 two-story and basement brick dwells., 46' x 62', Vincennes Ave., near Thirty-fifth St.; cost, \$9,000.

Glenn & Bee, one-story brick boiler-shop, 60' x 132', Fulton St., near Clinton St.; cost, \$8,000.

J. B. Hammond & Bro., two-story brick dwells., 45' x 46', Seminary Ave., near Webster St.; cost, \$4,000.

Geo. Engler, two-story and basement brick dwell. and store, 22' x 50', 185 Sedgwick St.; cost, \$2,500.

J. P. Roach, two-story brick addition to dwell. and barn, 17' x 27', 2280 Calumet Ave.; cost, \$3,500.

Y. Churan, one-story brick store, 22' x 70', 1073 Blue Island Ave.; cost, \$2,700.

D. E. Gross, two-story brick store and dwell., 22' x 46', Ashland Ave. and Thirty-sixth St.; cost, \$2,500.

S. Peterson, 3 two-story and basement brick dwells., 61' x 64', 723 to 727 Sedgwick St.; cost, \$10,000.

Jerome Beecher, 12 two-story brick dwells., 20' x 62', 238 Calumet Ave., near Thirty-fifth St.; cost, \$42,000.

Augusta de Horn, 4 three-story brick stores and flats, 50' x 80', Wentworth Ave., near Twenty-seventh St.; cost, \$15,000.

Wilson & Wheelock, 2 two-story brick dwells., 44' x 56', 911 and 913 West Monroe St.; cost, \$5,000.

R. Beuzelien, three-story brick flats, 24' x 58', Evergreen Ave., near Park St.; cost, \$6,000.

Cleveland, O.

HOUSES. — Stone house for Stewart H. Chisholm, on Euclid Ave. near Case Ave.; cost, \$40,000; Wm. Robertson, carpenter; Thos. Simmons, mason; Geo. H. Smith, architect.

Stone house and stable for Chas. J. Sheffield, on Prospect St., near Kinnard St.; cost, \$35,000; Thos. Linn, mason; Geo. H. Smith, architect.

STABLES. — Stone stable for J. D. Rockefeller, on cor. Euclid and Case Aves.; cost, \$14,000; Thos. Simmons, mason; Geo. H. Smith, architect.

New York.

BUILDING PERMITS. — East Eighty-fifth St., No. 311, four-story brownstone tenement; cost, \$14,500; owner, Fred Schuck, 516 East Eighty-fifth St.; architect, J. Brandt.

Fourth Ave., n e cor. Seventy-third St., six-story brick apartment-house; cost, \$60,000; owner, Charles R. Bliss, 304 East Seventy-second St.; architects, Thom & Wilson; mason, J. Kennedy.

Fourth Ave., n e, 45' 2" w Seventy-third St., 3 five-story stone apartment-houses; cost, each, \$15,000.

(Continued on next page.)

BUILDING INTELLIGENCE.

(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

218,283-289. BUILDING BLOCK OR TILE. — Augustine Campbell, Metuchen, N. J.
218,324. ABSORBENT MATERIAL AND PROCESS OF MANUFACTURING THE SAME. — Henry W. Johns, New York, N. Y.

218,328. EAVES-TROUGH. — Chas. Kaltenbach, Chicago, Ill.

218,331. COMPOUND FOR FILLING THE PORES OF WOOD. — Henry W. Matlack, Lawrenceburg, Ind.

218,335. FIRE-ESCAPE LADDER. — John Shepard, Brooklyn, N. Y.

218,336. COUPLER AND COUPLER FOR PIPES. — John Porch, Jr., Erie, Pa.

218,359. FASTENER FOR MEETING RAILS OF SASHES. — G. B. Smith, Cleveland, O.

218,365. DRAIN-FASTENING. — Benjamin F. Stultz, White Pigeon, Mich.

218,369. FIRE-ALARM. — Gustav W. Ulmar, Newton, Mass.

218,371. LATHING. — Frank Whaley, Pawling, N. Y.

218,375. FIRE-ESCAPE. — Joseph Whitley, Flint, Mich.

218,384. AUTOMATIC BRAKE FOR ELEVATORS. — Joseph H. Baird, Chicago, Ill.

218,397. SMOKE-FLUE. — Constantine L. Brady, St. Louis, Mo.

218,401. SELF CLOSING AND LOCKING HATCHWAY. — Joseph C. Chubb, Cincinnati, O.

218,412. TENSIONING-MACHINE. — William H. Doane, Cincinnati, O.

218,422. BOILER-COVERING. — Gilbert C. Fowler, St. Paul, Minn.

218,426. WEATHER-BOARD GUAGE. — Isaac A. Harris, St. Charles, Minn.

218,463. SAW-SET. — Noah S. Harvey, Detroit, Mich.

218,469. PIPE-JOINT. — Chas. W. Isbell, New York, N. Y.

218,470. BIT-STOCK. — William A. Ives, New Haven, Conn.

218,492. WINDOW-REFLECTOR. — And. G. Moodie, Stillwater, Minn.

218,493. HEATING-FURNACE. — William H. Moore, Portland, Ore.

218,494. ATTACHING WINDOW-SHADES TO ROLLERS. — Charles C. Mosher, Seneca Falls, N. Y.

218,508. BOILING-MACHINE. — Nathan Saunders, Westport, R. I.

218,517. APPARATUS FOR TRANSFERRING WOOD. — Benjamin C. Smith, Searport, Me.

218,526. MANUFACTURE OF COMPOSITE PAVEMENT. — Peter Stuart, Edinburgh, County of Midlothian, North Britain.

218,530. SAFETY ATTACHMENT AND GOVERNOR FOR ELEVATORS. — Arthus A. Wilder, Detroit, Mich.

218,547. ARTIFICIAL STONE. — John E. Wynkoop, Philadelphia, Pa.

218,551. REVERSIBLE LATCH. — Joseph P. Baumgartner, Philadelphia, Pa.

218,559. DISINFECTING ATTACHMENT FOR SEWERS, ETC. — James D. Jackson, Washington, D. C.

218,562. ELEVATOR. — Norton P. Oles and Rudolph C. Schmidt, Yonkers, N. Y.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS. — Since our last report twenty-six permits have been issued, of which the following are the more deserving of notice: —

Dennis Sullivan, two-story brick building, Madison St., between Greenmount Ave. and Forrest St.

St. James House for Boys, four-story brick building, 29 x 33, n. e. cor. High and Low Sts.

Joshua L. Reed, three-story brick buildings, Lanvale St., beginning at the e. w. cor. of Mt. Royal Ave.

H. Hurley, two-story brick building, Frederick Ave., in rear of 551 West Baltimore St.

Jacob Saum, 9 three-story brick buildings, Gilmer St., between Cook and Freeman Sts.

Aug. Herginroter, 2 two-story brick buildings, Castle St., 125 x 5 of Fayette St.

Geo. Bunneke, 2 two-story brick buildings, Calverton Road, between Frederick Ave. and Smallwood, and 2 two-story brick buildings in rear of the above.

Baltimore Permanent Building and Land Association, 3 three-story brick buildings, Harford Ave., between Biddle and John Sts.

H. G. Stewart, 3 three-story brick buildings, Madison St., s. of Madison Ave. church.

Estato of Jacob Kierle, two-story brick building, n. e. cor. McKidney St. and Bradford Alley.

Robert Stewart, 6 two-story brick buildings, Hudson St., between Patuxent and Curley Sts.

HOUSES. — Nine houses are in process of erection on John St., near Lavale St., for Mr. Lawrence Turnbull. They are being built of pressed brick and North River limestone, with half-timbered gables, etc., and have a frontage of 16' each; cost, about \$4,500 each; Mr. Samuel Black, builder; Messrs. J. A. & W. T. Wilson, architects.

Boston.

BUILDING PERMITS. — Brick, — Beacon St., 316, rear of Geo. N. Dana, stable, 28 x 34; Vinal & Dodge, builders.

Harwich St., near Yarmouth St., for J. L. Lamprey, 4 dwellings, 20' x 35', three-story; J. F. Mead, builder.

Commonwealth Ave., nearly opp. Stark St., for Richard S. Bartlett, dye house, 40' x 30'; N. M. Hummell, builder. Also, boiler house, 15' x 30'.

Commonwealth Ave., No. 226, for Asa H. Caton, 3 dwellings, 25' x 65', three-story and mansard.

Neponset St., near Hereford St., for H. L. Daggett, dwell. and stable, 22' x 92', two-story; Webster & Dixon, builders.

Wood, — Washington St., rear of near Lexington St., for Daniel McKenney, stable, 28' x 30'; two-story.

East Fifth St., near 1st St., for Wm. Devine, 3 dwellings, 20' x 30' 6", three-story; M. Beatty, mason; Wm. Peard, carpenter.

Cobden St., near Walnut Ave., for Wm. B. Quigley, dwell., 21' x 41', two-story; W. B. Quigley, builder.

Border St., near Central Sq., for John S. Weeks, blacksmith shop, 30' x 60', two-story; Leonard Pickering, builder.

Fond St., rear of near Rockwood St., for J. I. Bowditch, greenhouse, 22' x 42'; W. K. Melcher, builder.

Colony St., Nos. 36, 38, and 40, for Leander H. Jones, 3 dwellings, 21' x 35', three-story; Delano & Little, builders.

M. St., near East Seventh St., for Wm. T. Eaton, 4 dwellings, 30' x 32', two-story; Wm. T. Eaton, builder.

Saratoga St., No. 470, for Carl Schuler, stable, 28' x 30', two-story; M. Coffin, builder.

Hotel, — a new hotel is soon to be built on the present site of the Adams House. It will be seven stories high, and contain some 200 rooms. Plans are now being made by Wm. Washburn, architect, of this city.

Brooklyn.

BUILDING PERMITS. — Franklin St., n. w. cor. Java St., 2 four-story brick stores, tenements, lodge-rooms, etc.; total cost, \$22,000; owner and builder, Jonathan K. Fairbank, 314 West Twenty-fourth St., New York.

Lafayette Ave., northerly cor. Tompkins St., 2 three-story brick and brownstone dwellings; owner and builder, S. C. Phillips, 623 Wiloughby Ave., New York.

Gates Ave., n. s. 130' w. end Ave., 3 three-story brownstone flats; cost, each \$6,000; owner, architect, and builder, G. G. Hall, 63 Patchen Ave.

Monroe St., n. s. 336 w. Raleigh Ave., two-story brownstone dwell.; cost, \$20,000; owner, Patrick Butler, 364 Hart St.; architect, J. E. Dwyer; builders, T. Phelan and J. E. Hres.

Bushwick Ave., No. 111, w. s. 45' n. McKibben St., three-story frame store and tenement; cost, \$4,000; owner, F. Kruse, Bushwick Ave., cor. McKibben St.; architect, Th. Engelhardt; builders, S. Preiss and J. G. Hooper.

Luguer St., n. s. 89' w. Clinton St., three-story brick tenement; owner, Martin Carroll; architect, T. F. Houghton; builder, F. J. Carlin.

Vanderbilt Ave., e. s. 110' w. Raleigh Ave., one-story brick greenhouse; cost, \$20,000; owner, C. Pratt, Clinton Ave.; architect, H. J. Farquhar; builders, J. Look and B. Cozins.

Morgan Ave., n. w. cor. Van Eyck St., one-story brick factory; cost, \$4,000; owner, L. Waterbury & Co., Morgan Ave.; architect, B. Cozins; builders, J. McQuaid and B. Cozins.

Tenth St., n. s. 100' e. Fifth Ave., 3 two-story brick dwellings; cost, each \$4,000; owner, Peter Kelly, Van Brunt St.; architect, Jno. Kelly; builders, F. & J. Kelly.

Monroe St., s. s. 200' e. Nostrand Ave., 4 two-and-a-half-story brownstone dwellings; cost, \$4,500; owner and carpenter, Joshua M. Brush, 391 Nostrand Ave.; mason, E. Van Voorhis.

Mary Ave., n. w. cor. Hancock St., 2 four-story brownstone apartment houses; cost, each \$6,000; owner, Frederica M. Kinney, 418 Third St.; architect, J. P. Kinney.

Dean St., s. s. 75' e. Sixth Ave., four-story brick flat; cost, \$9,000; owner, M. M. Vail, 346 Broadway, N. Y.; architect, M. J. Morrill; builder, Thomas Ward.

ALTERATIONS. — Henry St., between Amity St. and Pacific St., raised one-story; also two-story brick extensions, interior alterations, hospital; cost, \$25,000; owner, Long Island College Hospital; architect, F. E. Lockwood; builder, F. D. Norris.

Chicago.

BUILDING PERMITS. — B. Beagelson, three-story brick flats, 24' x 58', Evergreen Ave., near Park St.; cost, \$6,000.

Union Iron & Steel Co., addition to wire-factory, 60' x 65, Ashland Ave., near Archer St.; cost, \$7,000.

W. Grob, one-story brick cottage, 21' x 46', Maxwell St., near Waller St.; cost, \$2,000.

Mrs. M. B. Hewitt, three-story and basement brick dwell., 28' x 68', Adams St., near Ladin St.; cost, \$20,000.

J. G. Owsley, 6 two-story and basement brick dwellings, 50' x 130', Adams and Robey Sts.; cost, \$20,000.

Thos. Devine, two-story brick dwell., 20' x 48', Dearborn St., near Thirtieth St.; cost, \$2,100.

Charles Yunge, four-story and basement brick store and dwell., 912 Milwaukee Ave., 24' x 72'; cost, \$9,000.

John Johnson, Jr., four-story and basement brick factory, 60' x 110', South Canal St.; cost, \$25,000.

U. S. Rolling Stock Co., one-story brick shed, 100' x 230', Blue Island Ave. and Robey St.; cost, \$6,000.

A. B. Harris, four-story and basement brick store and dwell., 27' x 55', 335 State St.; cost, \$12,000.

John McVey, one-story brick factory, 70' x 100', 23 to 27 Michigan St.; cost, \$7,000.

Cincinnati.

BUILDING PERMITS. — Since our last report the following building permits have been issued: —

Adam Stiefel, two-story brick, Spring Grove Ave.; cost, \$2,500.

F. Schutman, four-story brick, Pearl St., bet. Elm and Plum Sts.; cost, \$5,000.

Fred Luckey, three-story brick, Western Ave., bet. Dayton and Bank Sts.; cost, \$4,100.

Lippelman & Co., one-story brick warehouse, on Grisi St.; cost, \$5,000.

J. L. Hayden, repair of two-story brick, Plum St., near Commerce St.; cost, \$4,000.

Twenty-two permits for repairs; total cost, \$12,930.

Total permits, 28.

Total cost, \$31,650.

Total cost to date, \$1,635,650.

Total permits to date, 529.

New York.

BUILDING PERMITS. — Robbins Ave., w. s. 20' n. One Hundred and Forty-first St., 17 two-story brick dwellings; cost, each \$4,500; owner, John G. Holmster; architect, and builder, Chas. Bornkamp.

Ninety-fourth St., s. s. 75' w. Lexington Ave., 8 four-story brownstone tenements; cost, each \$10,000; owners, Emeline and Elizabeth Johnston, 418 East Eighty-fourth St.; architect, A. B. Ogden.

One Hundred and Forty-second St., s. s. 150' e. Alexander Ave., two-story frame cottage brick basement dwell.; cost, \$4,000; owner, W. H. Mondinger, One Hundred and Forty-third St. and Third Ave.; architect, W. H. Hannon & Sons.

Washington Ave., e. s. 50' n. One Hundred and Sixty-fourth St., 3 two-story frame dwellings; cost, each \$2,000; owner, Wm. Roland, Washington Ave., between One Hundred and Sixty-fourth and One Hundred and Sixty-fifth Sts.; architect, W. W. Gardner.

Washington Ave., e. s. 150' e. One Hundred and Sixty-fourth St., 2 two-story frame dwellings; cost, each \$2,500; owner, Adolph Speck, Washington Ave., between One Hundred and Sixty-third and One Hundred and Sixty-fourth Sts.; architect, W. W. Gardner; builders, Wm. MacPherson & Son.

East One Hundred and Seventeenth St., No. 342, four-story brick tenement; cost, \$12,000; owner, Chas. J. Walker, 2153 Third Ave.; architect, J. McIntyre; builder, — Walker.

Pearl St., Nos. 324 and 326, five-story iron and brick stores and lofts for factory; cost, \$30,000; owner, Jas. Gallery, Alleghany City, Pa.; architect, W. F. Kuhles; builders, A. Eberspacher and W. F. O'Connor.

One Hundred and Twenty-third St., s. s. 200' e. Fifth Ave., 6 four-story brick tenements; cost, each \$15,000; owner and architect, Alfred Kehon, 318 East One Hundred and Twenty-fifth St.; builder, Isaac A. Hopper.

Ninety-fourth St., s. s. 250' w. Fourth Ave., four-story brownstone dwell.; cost, \$20,000; owner and builder, Gideon E. Fountain, 153 East Fifty-second St.; architect, Jas. E. Ware.

Second Ave., s. w. cor. One Hundred and Eighth St., 5 four-story brick stores and tenements; cost, each \$9,000; owner, Wilhelmina Juch, One Hundred and Fourth St. and First Ave.; architect, Frank S. Barus.

Second Ave., s. e. cor. One Hundred and Fourth St., 4 four-story stores and tenements; cost, each \$9,000; owner, Wilhelmina Juch; architect, Fr. S. Barus; builder, W. Juch.

One Hundred and Fourth St., s. s. 75' e. Second Ave., four-story brick and Ohio stone dwell.; cost, \$8,000; owner, Wilhelmina Juch; architect, Fr. S. Barus; builder, W. Juch.

One Hundred and Sixth St., n. s. 150' e. Second Ave., 3 four-story brick and stone dwellings; cost, each \$8,000; owner, Wilhelmina Juch; architect, Fr. S. Barus.

One Hundred and Eighth St., s. s. 75' w. Second Ave., 4 four-story brick and stone dwellings; cost, each \$8,000; owner, Wilhelmina Juch; architect, Fr. S. Barus.

One Hundred and Nineteenth St., n. s. 100' e. Fourth Ave., 5 four-story brick flats; cost, each \$12,000; owner, Little L. Dean, 319 East One Hundred and Twenty-first St.; architect, R. Rosenkott; builder, H. N. Dean.

East Fifty-fifth St., No. 145, three-story brick and brownstone restaurant; cost, \$9,000; owners, M. & E. Schaefer, 16 East Fifty-fifth St.; architect, J. Kastner; builders, R. Huxon and Hoffman & Schwartz.

East Fifty-eighth St., Nos. 147 to 153, one-story iron pavilion; cost, \$12,000; owner, M. & E. C. Schaefer, 16 East Fifty-fifth St.; architect, J. Kastner; builders, R. Huxon and Hoffman & Schwartz.

Fifty-ninth St., s. s. 131' w. Ave. A., 2 four-story brick tenements; cost, each \$14,000; owner and builder, Jas. E. Ray, 222 East One Hundred and Twenty-third St.

One Hundred and Thirtieth St., n. s. 225' w. Seventh Ave., 4 three-story brownstone dwellings; cost, each \$5,000; owner, W. J. Reynolds, 209 West One Hundred and Twenty-eighth St.; architect, J. H. Valentine; mason, not selected; carpenter, J. R. Smith.

One Hundred and Thirty-second St., n. s. 135' e. Fifth Ave., four-story brownstone flat; cost, \$10,000; owner and builder, Patrick Dunphy, 2250 Fourth Ave.; architect, J. H. Valentine.

Ninth Ave., e. s. opposite One Hundred and Fifty-third St., three-story brick and stone dwell.; cost, \$65,000; owner, F. W. Du Bois, 510 West Thirtieth St.; architect, Chas. Baxter.

Ninth Ave., e. s. between One Hundred and Fifty-third and One Hundred and Fifty-fourth Sts., 8 three-story brick and stone dwellings; cost, each \$17,000; owner, F. W. Du Bois, 510 West Thirtieth St.; architect, Chas. Baxter.

One Hundred and Twenty-eighth St., s. s. 75' e. Seventh Ave., 2 four-story brick apartment houses; cost, each \$30,000; owner, E. F. L. Baxter, Brooklyn; architect, Chas. Baxter.

One Hundred and Thirty-second St., s. s. 125' w. Sixth Ave., 2 three-story dwellings; cost, each \$7,000; owner, E. F. L. Baxter; architect, Chas. Baxter.

Lexington Ave., s. e. cor. Thirtieth-seventh St., 4 four-story brick and brownstone dwellings; cost, \$22,000, \$28,000, and \$24,000; owner, Chas. Buck, 63 East Forty-first St.; architects and builders, Chas. Buck & Co.

East One Hundred and Ninth St., No. 312, four-story brick tenement; cost, \$8,000; owner and builder, Joseph Handwerker, 174 East One Hundred and Twenty-third St.; architect, Bart Walther.

Forty-third St., n. s. 90' e. Lexington Ave., five-story brownstone dwell.; cost, \$20,000; owner and builder, Francis Campbell, 709 Madison Ave.; architect, Fr. S. Barus.

ALTERATIONS. — West Thirty-second St., No. 104, new brick wall from front to rear, 98', interior alterations. (Continued on next page.)

Oct 29, 1881

THE AM

VOL. X.

NOVEMBER

Entered at the Post Office

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New York Fire Departm

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NOVEMBER 5, 1881.

Entered at the Post Office at Boston as second-class matter.

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By the death of the distinguished architect, Strack, of Berlin, a vacancy is made in the list of foreign members of the Institute of France, in the division of Fine Arts, and a commission has been appointed to present names of new candidates. The number of foreign members in this division is limited to ten, and an election to the vacant chair would perhaps be the highest professional distinction that Europe can afford. No mention is made of any particular architect as being likely to receive the nomination, and we can only form the merest conjectures, but it seems altogether probable that another German will be selected, possibly the young but distinguished designer of the new Town-Hall at Vienna. The practice of the French in associating the Academies of Science, Fine Arts, Ethics and Letters in one body is unquestionably valuable, not only to the members of each division, but to the interest of knowledge as a whole. It is an honor, certainly, to be a member of the most distinguished body of artists in the world, but the dignity of membership in a society composed of the most renowned individuals in every branch of knowledge is still greater, and each Academy gains by being able to offer it in addition to the compliment which an election into its own ranks confers.

THE discussion in regard to the danger of fire from electric-light wires continues, and new instances are frequently brought forward. A telephone was recently destroyed in Boston by the accidental contact of its wire with that of an electric light, some wood-work about the entrance of the Germania Theatre was set on fire a few days ago, and one of the signal boxes of the New York Fire Department was almost entirely consumed, and the pole charred, by a similar occurrence. The great distance at which such fires may be set, and the impossibility, under present circumstances, of guarding against them in any city building or office furnished with a telephone, makes some change in the mode of conveying the wires for powerful currents particularly desirable. The New York Board of Fire Underwriters, not content with the regulations adopted a few months ago in regard to the inspection of electric wires in buildings, recently appointed a committee to study a different aspect of the case, and on its recommendation has resolved to notify the owners and occupants of all buildings in which are found uncovered electric-light wires, or lamps without globes, or placed in globes with open bottoms, to cover the wires, or alter such lamps, within ten days from the date of the notice, and to request the parties to refrain from using the lights until the alterations are made; and if the notice is not complied with, to advise the companies insuring the property to proceed, after a reasonable time, to cancel their policies. The Fire Commissioners of New York regard the matter as a very important one. The insulating coating of gutta-percha over such wires would be immediately removed by a moderate heat, and firemen who might come in contact with them while in that condition would run great danger of serious or fatal shocks.

ANOTHER example of the danger which attends the unrestricted stringing over city buildings of wires for the conveyance of electric currents of all kinds is reported from Chicago. The manager of the telephone exchange in that city a few days ago observed smoke proceeding from the "answering

board," on which is arranged a series of brass strips about one-eighth of an inch apart, which serves to make connections between the different lines. In a few minutes little flames were seen to jump from one strip to another across the board, and the manager, suspecting that one of the wires had come in contact with an electric-light wire, disconnected the board. Returning to his place, he found that the transmitter, a wooden box containing the rubber diaphragm which serves to receive the vibrations communicated by the voice, was burning, and he was obliged to disconnect this also, and throw water on it to extinguish the fire. For a time no further disturbance took place, but the powerful current from the electric-light wire, shut off from its more direct course, finally made its way to the connections of another answering-board, some eight feet distant from the first, which in its turn began to emit smoke and flames. The ground wire was then cut off, and the current could no longer pass to the earth through any of the instruments in the exchange. It was still possible, however, for it to gain an earth connection by means of the ground-wire of some telephone at a distance, provided it could reach the switch-board which connected the exchange with the other main lines, and this in the course of half an hour it succeeded in doing, although the switch-board was ten feet away from the wire by which the electric-light current had entered the building. As in the other cases, the board began to smoke, and lines of flame ran over it, but it was at last disconnected and the fire extinguished. A telephone in the office of the Chicago Music Company, by which the current had apparently made its way to the earth after the cutting off of the ground-wire at the exchange, was however destroyed, the induction coils being melted, and one of the wires running over the roof of the exchange was also melted. On examination it proved that an electric lamp in McVicker's Theatre had been for some days previously operated by the current from a generator at a distance, and on its use being discontinued, the wire had been simply cut, and the end left hanging loose in such a position as to allow it to fall upon the telephone wire.

THE Grand Opera at Paris is to be illuminated by a combination of nearly all the known forms of electric light, under the charge of M. Garnier, the architect of the building, who has obtained a grant of public money for the purpose. The great foyer or vestibule is to be furnished with twenty of the so-called "sun-lamps," such as are used to light the picture-gallery at the Electrical Exhibition, but arranged in such a way as to be concealed from the spectators by bronze ornaments, which will throw the direct rays upon the ceiling, to be returned again in an agreeable diffused brilliancy through the room. Nothing could well be conceived more noble than such an illumination as this, reflected from the pictures and mosaics of the most gorgeous apartment of modern times, and the effect will be rather heightened by the clusters of Edison incandescent lamps which are to take the place of the present gas-burners. The little parlors which open from each end of the great foyer are to be lighted by a hundred and fifty Maxim incandescent lights, and the auditorium is to have five hundred of the English incandescent lights, under Swan's system, attached to the great chandelier. The loggia which forms so picturesque a feature of the exterior is to be furnished with twenty Jablockhoff candles, and the grand staircase with thirty-five Brush lights, while the low hall under the auditorium is to be lighted with a central sun-burner by the Werdermann system, and the neighboring passage-way by the reflecting Jaspard lamps. For fear of accidents the gas will for a few evenings be lighted at all the burners, and turned down to a feeble flame, so that if a wire should break, or any other occurrence should make it necessary to interrupt the electric current, the building may not be left in darkness.

THE report presented to the stockholders of the Edison Electric Light Company at their annual meeting is full of interesting matter. The company has proceeded so quietly in perfecting its extensive schemes that few persons know how much work has been done within the past year. In January, 1881, just after the successful illumination at Menlo Park, Mr. Edison announced that his system was perfected, and experiments were discontinued, and preparations made for introducing the light on a large scale in the city of New York. Some

Twenty-two permits for repairs; total cost, \$12,000.
Total permits, 28.
Total cost, \$31,850.
Total cost to date, \$1,635,650.
Total permits to date, 529.
New York.
BUILDING PERMITS.—Robbins Ave., w s, 20' n One Hundred and Forty-first St., 17 two-sty brick dwells.; cost, each \$4,500; owner, John G. Heintzer; architect and builder, Chas. Bornkamp.
Ninety-fourth St., s s, 75' w Lexington Ave., 5 four-sty brownstone tenements; cost, each \$10,000; owners, Emeline and Elizabeth Johnston, 413 East Eighty-fourth St.; architect, A. B. Ogden.
One Hundred and Forty-second St., s s, 156' e Alexander Ave., two-sty frame cottage brick basement cell; cost, \$4,000; owner, W. H. Moudinger, One Hundred and Forty-third St. and Third Ave.; architect, W. H. Hanlon & Sons.
Washington Ave., s s, 50' n One Hundred and Sixty-fourth St., 3 two-sty frame dwells.; cost, each \$2,000; owner, Wm. Roland, Washington Ave., between One Hundred and Sixty-fourth and One Hundred and Sixty-fifth Sts.; architect, W. W. Gardner.
Washington Ave., s s, 150' n One Hundred and Sixty-fourth St., 2 two-sty frame dwells.; cost, each \$2,000; owner, Adolph Speck, Washington Ave., between One Hundred and Sixty-third and One Hundred and Sixty-fourth Sts.; architect, W. W. Gardner; builders, Wm. MacPherson & Son.
East One Hundred and Seventeenth St., No. 312, four-sty brick tenement; cost, \$12,000; owner, Chris. Jas., 2155 Third Ave.; architect, J. McIntyre; builder, Walker.
East St., Nos. 324 and 326, five-sty iron and brick stores and lots for factory; cost, \$39,000; owner, J. Callery, Allegheny City, Pa.; architect, W. W. Gardner; builders, A. Eberspacher and W. F. O'Connor.
One Hundred and Twenty-third St., s s, 200' e Fifth Ave., 6 four-sty brick tenements; cost, each \$9,000; owner and architect, Alfred Kehoe, 318 East One Hundred and Twenty-fifth St.; builder, A. Hopper.
Ninety-fourth St., s s, 250' w Fourth Ave., four-sty brownstone dwell.; cost, \$29,000; owner and builder, E. Fountain, 153 East Sixty-second St.; architect, Jas. E. Ware.
Second Ave., s e cor. One Hundred and Eighth St., 5 four-sty brick stores and tenements; cost, \$29,000; owner, Wilhelmina Juch, One Hundred and Fourth St. and First Ave.; architect, Frank S. Barus.
Second Ave., s e cor. One Hundred and Fourth St., four-sty stores and tenements; cost, \$9,000; owner, Wilhelmina Juch; architect, Fr. S. Barus; builder, W. Juch.
Second Ave., s e cor. One Hundred and Fourth St., 11 four-sty dwell.; cost, \$8,000; owner, Wm. Juch; architect, Fr. S. Barus; builder, W. Juch.
One Hundred and Sixth St., s s, 150' e Second Ave., four-sty brick and stone dwells.; cost, each \$8,000; owner, Wilhelmina Juch; architect, Fr. S. Barus.
One Hundred and Eighth St., s s, 75' w Second Ave., 8 four-sty brick and stone dwells.; cost, each \$8,000; owner, Wilhelmina Juch; architect, Fr. S. Barus.
One Hundred and Nineteenth St., n s, 100' e Fourth Ave., 5 four-sty brick flats; cost, each \$12,000; owner, Lottie L. Dean, 310 East One Hundred and Twenty-first St.; architect, R. Rosenstock; builder, L. Dean.
Fifty-fifth St., No. 145, three-sty brick and stone restaurant; cost, \$9,000; owners, M. & E. Schaefer, 16 East Fifty-fifth St.; architect, J. Kastner; builders, R. Huson and Hoffman & Schwartz.
Fifty-fifth St., Nos. 147 to 153, one-sty iron tenement; cost, \$12,000; owner, M. & E. C. Schaefer, 16 East Fifty-fifth St.; architect, J. Kastner; builders, R. Huson and Hoffman & Schwartz.
Ninth St., s s, 131' w Ave. A., 2 four-sty tenements; cost, each \$10,000; owner and architect, Jas. E. Ray, 222 East One Hundred and Tenth St.
One Hundred and Thirtieth St., n s, 225' w Seventh Ave., 4 three-sty brownstone dwells.; cost, \$9,000; owner, W. J. Reynolds, 249 West One Hundred and Twenty-eighth St.; architect, J. H. Hattie; mason, not selected; carpenter, J. H. Hattie.
One Hundred and Thirty-second St., n s, 135' e Ave., four-sty brownstone flat; cost, \$10,000; owner and builder, Patrick Murphy, 2293 Fourth Ave.; architect, J. H. Valentine.
Ninth St., s s, opposite One Hundred and Fifty-fifth St., three-sty brick and stone dwell.; cost, \$8,000; owner, F. W. Du Bois, 510 West Thirtieth St.; architect, Chas. Baxter.
Ninth Ave., s e, between One Hundred and Fifty-first and One Hundred and Fifty-fourth Sts., 8 three-sty brick and stone dwells.; cost, each \$17,000; owner, F. U. Du Bois, 510 West Thirtieth St.; architect, Chas. Baxter.
One Hundred and Twenty-eighth St., s s, 75' e Ave., 2 four-sty brick apartment-houses; cost, \$30,000; owner, E. F. L. Baxter, Brookline; architect, Chas. Baxter.
One Hundred and Thirty-second St., s s, 125' w Ave., 2 three-sty dwells.; cost, each \$7,000; owner, E. F. L. Baxter; architect, Chas. Baxter.
Ninth Ave., s e cor. Thirty-seventh St., 4 four-sty brick and brownstone dwells.; cost, \$22,000; owner, Chas. Buck, 63 East First St.; architects and builders, Chas. Buck.
One Hundred and Ninth St., No. 312, four-sty tenement; cost, \$8,000; owner and builder, Handwerker, 174 East One Hundred and Tenth St.; architect, Bart Walker.
Third St., n s, 30' e Lexington Ave., five-sty brownstone dwell.; cost, \$20,000; owner and builder, Campbell, 709 Madison Ave.; architect, Fr. S. Barus.
Ninth St., s s, 104' w Ave. A., interior alterations and next page.)

BUILDING INTELLIGENCE.

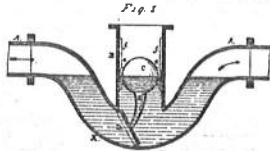
(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

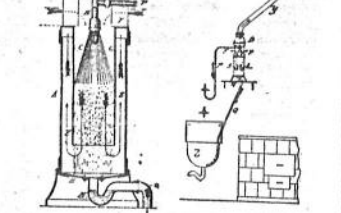
[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

245,674. TRAP.—John T. Titus, San Francisco, Cal. This invention relates to an improved trap valve for preventing the foul gases from passing through house sewers and waste-pipes into the rooms of houses. It also prevents water from passing from the main sewer into the cellars of the houses, with which the side sewers connect, in case the main sewer should become choked or where the tide-water rises up into the main sewer. It consists of an arrangement by which a valve, connected with a float, is made to automatically drop down and close the passage through the sewer when no water is passing through it. This valve is actuated at such an angle across the passage that water passing through the pipe or sewer from the house to the main sewer opens it; but any pressure on its opposite side, either gas or water, presses it more firmly upon its seat. A represents a branch sewer which leads the sewage from a house to the main sewer. At some convenient point in the length of this pipe is made a downward bend, R, so as to form a trap. Above the lowest part of this bend is a vertical pipe, B, which extends up to the surface of the ground and is closed at its upper end by any suitable device. In this vertical chamber is a ball-cock, C, to the lower side of which an angular valve with a proper seat, D, is con-



nected by a stem, E, so that the valve will stand at an angle across the opening which leads into the chamber on the house side. The float C is guided in its movement in the chamber B either by projecting flanges, e, on each side entering vertical grooves, f, in the side of the chamber, as shown, or by other equivalent means that will allow it to move up and down freely and partially rotate when the valve is raised by the pressure of water against its under side. When the trap is full of standing water the float will press the valve D upon its seat across the passage, in which position it will remain until water attempts to pass through to the main sewer on its way from the house. When this happens the additional pressure of water against the lower inclined face of the valve or stopper will force it from its seat and lift the float C in the vertical tube or chamber, so as to allow the water to pass through to the main sewer under the valve; but when the valve is on its seat and closed any pressure coming from the main sewer, whether it be gas or water, will only press it more firmly upon its seat. The stem-connection E is made wedge-shaped, with its sharp edge toward the house-sewer, so that it will be less liable to catch and lodge any rags, pieces of paper, or other substance that is carried by the water.

245,149. VENTILATOR.—August Kind, Berlin, Germany. This hydraulic ventilator or air-propelling apparatus is worked by means of water under pressure; and its object is to refresh, purify, moisten, and



to cool (or heat) the air of dwelling and other rooms. Fig. 1 is a vertical section of the apparatus. Fig. 2 is a horizontal section of the same, taken through the passages F. Fig. 3 is a view of the apparatus applied, showing the feeding and discharge pipes and some of

the circumjacent parts of a room. The cylinder C, open on the lower end, is fastened concentrically on and into the larger cylinder A, the bottom of which is slightly hollowed out. The annular space E, between the two cylinders A and C, forms the air-passage which leads to the air-distributor K on top of the apparatus, through the perforated cover D of which the air passes into the room or into a draught-pipe, leading off the bad gases of dwelling rooms, the vapors of kitchens, etc., into the open air or into a chimney. The inner space of the cylinder C forms the spray-chamber, communicating on the lower end with the air-passage F, on the upper end with the air-opening F under the bottom of the distributor K. To the under side of this bottom is fastened the spray-nozzle H, receiving the water which is under pressure, from the conducting-pipe P, and discharging it in form of a diverging cone against the inner walls of the cylinder C. By the force of the water the latter is partly deflected from the walls of the cylinder C against the opposite walls, from whence it drops down to the bottom B of the cylinder A; partly it falls down directly to the bottom B, and is carried off by the waste-pipe Q, furnished with a trap, M. The working of the apparatus is as follows: The water ejected and spurting from the nozzle H with great force fills the cylinder C with a very fine divided spray of water, which acts in downward direction like a continuous plunger, forcing along all the air contained in the cylinder C, and sucking, therefore, new air, gases, or vapors through the openings F. The passages F are in effect holes cut into the cylinders A and C, which holes are closed on all sides between the cylinders. The air-passages E continue to the dome K, except where they are interrupted by the passages F. It is easy to understand that when the air of a room is drawn into the openings F, and after passing the apparatus is forced again into the room, it is purified and cooled (or heated), and that in this manner a very healthy and refreshing ventilation is produced. Instead of drawing the air from the room it may be fed to the apparatus from outside of the room, a pipe leading to the openings F, as shown in Fig. 1, by dotted lines. In Fig. 3 is shown, in smaller scale, the apparatus as used in a kitchen to free the latter from moisture and moist vapors. Z is the sink, into which the waste-water of the pipe Q is carried off. Y is a pipe leading the drawn-off vapors and air into the chimney.

245,373-375. FILTER.—Gottlieb F. Burkhardt, Boston, Mass.

245,688. WRENCH.—Joseph P. Balgh, Pittsburg, Pa.

245,691. VENTILATOR.—Patrick Mihan, Chelsea, Mass.

245,697. FIRE-ESCAPE.—George A. Phifer, New Richmond, O.

245,638. QUARRY-FRAME FOR ROCK-DRILLS.—Geo. H. Callingsworth, New York, N. Y.

245,693. STAGE-TRAP.—William M. Davene, New York, N. Y.

245,645. SKYLIGHT.—Jas. W. Goddes, Baltimore, Md.

245,650. HEATING-STOVE.—George W. Herrick, Detroit, Mich.

245,652. T-SQUARE.—Arnold Hoernmann, Hoboken, N. J.

245,661. GLASS MONUMENTS, TABLETS, ETC.—Christopher W. McLean, New Bern, N. C.

245,663. WATER-CLOSET SEAT.—George R. Moore, Philadelphia, Pa.

245,664. ARTESIAN WELL.—Benjamin R. Norton, Alameda, Cal.

245,667. PORTABLE FLOOR, ETC.—Jacob Ring, Brooklyn, N. Y.

245,670. PIPE-JOINT.—Edward P. Trumbull, Hartford, Conn.

245,702. STEAM-PIPE AND PUMP-DRIVER.—Jesse Burton, New York, N. Y.

245,749. PNEUMATIC WATER-ELEVATOR.—Samuel W. Hudson, Houdonville, Pa.

245,767. ROCK-DRILLING MACHINE.—Henry F. Peacock, San Francisco, Cal.

245,790. PORTABLE COMBINED BATH-TUB AND HEATER.—William Q. Prewitt, Lexington, Ky.

245,812. MACHINE FOR DRILLING METAL.—William Tinsell, New York, N. Y.

245,825. LIGHTNING-ARRESTER.—Lewis T. Young, Philadelphia, Pa.

245,827-831. AUTOMATIC FIRE-EXTINGUISHER.—Frederick Grinnell, Providence, R. I.

245,832. WEATHER-STRIP.—Mortimer S. Harsha, Chicago, Ill.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—Since our last report eighteen permits have been issued, the more important being as follows:—

J. S. Rosenthal, 3 two-story brick buildings, Mount St., n of Edmondson Ave.

Wm. Miles, to alter stone building into 5 dwellings, in rear s e cor. Little Monument and St. Mary St.

John North, three-story brick building, Little Church St., between Johnson and Williams Sts.

J. S. Tucker, 8 three-story brick buildings, 7 with 15' front, 1 with 18' front, Lafayette Ave., beginning at n w cor. Mount St.

P. M. Conway, two-story brick building, No. 31 Lemon St., between Amity and Schroeder Sts.

A. Veiskettel, 5 three-story brick buildings, and 4 two-story brick buildings, Dillon St., between Canton and Robinson Sts.

Jno. H. Morrow, 2 two-story brick buildings, in rear of 141 York St., between Sharp and Hanover Sts.

Mission Building.—Mr. Benjamin B. Owens, architect, is preparing drawings for a City Mission building, to be located on North Paen St., between Lexington and Saratoga Sts. The building, which is to be erected under the auspices of the M. E. Church,

will consist of a hall in the rear, 70' x 35', with seating capacity for 2,000 persons; the front building, 30' x 70', being divided into a small hall, kitchen, etc. The building will be constructed of brick and stone, and cost about \$20,000.

Boston.

BUILDING PERMITS.—Brick.—Newbury St., near Herald St., for Chas. W. Parker, dwell. and stable, 23' x 44', two-story.

Columbus Ave., No. 561, for Woodbury & Leighton, family hotel, 22' 6" x 25' 6", four-story; and masonry; Woodbury & Leighton, builders.

Commonwealth Ave., near Exeter St., for Thomas M. Hoth, dwell., 28' x 55' 4", four-story; and masonry; Woodbury & Leighton, builders.

Beacon St., Nos. 272 and 274, for Francis L. Higginson, dwell., 75' x 112', three-story; Webster & Dixon, builders.

N. St., Nos. 137 and 139, for H. B. Stratton, 2 dwell., 20' x 30', two-story; H. B. Stratton, builder.

Unnam'd St., rear of, near Harwich St., for John S. Lamprey, family hotel, 45' x 65', four-story; John F. Mead, builder.

Wood.—Mettie Ave., near Washington St., for Mrs. R. F. Shaw, dwell., 36' x 40', two-story; S. H. L. Pierce, builder.

Mr. Warren Pl., near Walnut Ave., for Geo. B. Faunce, dwell., 24' x 42', two-story.

Dix St., rear of, near Dorchester Ave., for R. Gardner Chase, stable, 38' x 45', two-story.

Western Ave., near Waverley St., for John W. Hollis, 6 dwell., 20' x 28', two-story; Jacob W. Berry, builder.

High St., rear of, opposite Charles St., for John Gately, dwell., 21' x 28'; John String, builder.

Washington Wharf, No. 119, for J. C. Trumbull & Cheney, storage, 30' x 80'; Trumbull & Cheney, builders.

Washington St., rear of, near Rockwell St., for R. G. Parker & Co., greenhouse, 16' x 49', and 10' x 95'; R. G. Parker & Co., builders.

Shawmut Ave., Nos. 822-836, for Highland R. R. Co., carriages-shed, 25' x 85', two-story.

Island St., near Hampden St., for James Hooper, dwell., 18' x 30', two-story; Lansing & Dri-co, builders.

Western Ave., rear, opposite Waverley St., for Benjamin Wood, builder.

Wales St., near Harvard St., for Emma L. Jacobs, dwell., 22' x 28', two-story; B. R. Lawrence, builder.

Bird St., rear of, near Ceylon St., for N. Y. & N. E. R. R. passenger station, 8' x 75'; Chas. Ensign, builder.

Mr. Pleasant Ave., No. 42, for Miranda E. Small, dwell., 17' 10" x 37', two-story; A. D. Gould, builder.

Foad St., near Avon St., for Jas. Glynn, 2 dwell., 19' 10" x 23'; Jos. P. Shaw, builder.

Brooklyn.

BUILDING PERMITS.—Huntington St., n s, and w s Owens Canal, one-story frame shed; cost, \$2,400; owners, H. J. Baker & Bros., Pearl St., New York; builder, Chas. M. White.

Third St., n s, 100' w Smith St., 2 four-story stone flats; cost, each \$8,000; owner and builder, James W. Hearing, 467 Hicks St.; architects, Parfitt Bros.

Fifth St., n s, e of Sixth Ave., 6 two-story brick dwell., cost, each \$4,400; owner, J. J. Allen; builders, J. Shorroek & P. Maguire.

Fulton St., s s, 160' e Bedford Ave., 2 four-story brownstone tenements; cost, each \$10,000; owner and carpenter, Albert Wilkinson, 331 Macdon St.

Dean St., n s, 124' 2" e Bedford Ave., 3 three-story brownstone dwell.; cost, each \$7,500; owner and builder, John Lee; architect, J. Mumford.

Boerum St., n s, 519' e Old Bushwick Ave., 4 two-story frame dwell.; owners, Cross, Austin & Co., cor. Kent Ave. and Cross St.; builders, W. Dafeidecker and J. J. Berlenbach.

Rush St., n s, between Kent and Wythe Aves., one-story brick shed; cost, \$2,000; owner, John Molleaur, builders, Thos. Parks and J. N. Brewster.

Classon Ave., w s, 237' e Gates Ave., 3 three-story brownstone dwell.; cost, each \$4,500; owner, Stephen R. Post, 255 Gates Ave.; architect and builder, Joseph L. Kirby.

Monroe St., n w cor. Throop Ave., 5 two-story brick dwell.; cost, \$3,500 each; owner, architect, etc., E. B. Sturges, 135 De Kalb Ave.; mason, Jas. Leckard.

Buffalo.

HOUSES.—Brick dwell., cor. of Swan and Chestnut Sts., cost, \$8,000; owner, Elijah Saxton.

Brick dwell., North St., near the "Circle"; cost, \$10,000; owner, R. K. Noye; architect, J. L. Silsbee, of Syracuse, N. Y.

RECEIVING VAULT.—For Forest Lawn Cemetery Association, to be constructed of Medina and Connecticut sandstone, 45' x 72'; cost, \$18,000; architect, C. B. Cook.

Chicago.

BUILDING PERMITS for the week ending October 31, 1881:—

C. Hacker, one-story front addition, 18' x 20', 1 Samuel St.; cost, \$600.

Wm. Blackhagen, brick basement, 20' x 44', 615 Superior St.; cost, \$1,000.

John Vorey, one-story brick cottage, 20' x 44', Eighteenth St., near Laflin St.; cost, \$1,000.

C. Erickson, one-story and basement brick store, 50' x 50', 119' Milwaukee Ave.; cost, \$8,000.

John Helma, one-story brick cottage, 20' x 24', Eighteenth St., near Laflin St.; cost, \$800.

James Stenson, two-story brick barn, 40' x 55', 90 Monroe St.; cost, \$3,000.

Mrs. M. L. White, brick basement, 22' x 60', 680 Warren Ave.; cost, \$1,200.

C. J. Johnson, one-story brick cottage, 20' x 24', Parrell St., near Thirty-fifth St.; cost, \$1,000.

James Stuppelmann, two-story brick dwell., 25' x 60', 1073 Madison St.; cost, \$4,000.

Mrs. Sarah Butlerfield, five-story brick store, 24' x 130', 20 Lake St.; cost, \$20,000.

R. F. Torrence, two-story brick barn, 28' x 60', 3634 Ellis Ave.; cost, \$2,000.

(Continued on next page.)

THE AMERICAN ARCHITECT AND BUILDING NEWS.

VOL. X.

NOVEMBER

Entered at the Post Office

SUMMARY:—

The American Art Review.

—The Duties and Obligations.

—Smoke Consumption.

—Trades-Union Congress.

New York Fire-Services.

graph Wire.—The Pro-

ducts of Paintings and

Electric Railway, Paris.

A BRIEF OBJECT-LESSON IN

THE ILLUSTRATIONS:—

House at Syracuse, N. Y.

Column, Athens, Greece.

THE FAIR OF THE MASSACHUSETTS

CIATION.—V.

PAINTING AND SCULPTURE IN

AN ELEVATED RAILWAY FOR

NEWCASTLE.

MEETING OF THE BOARD OF

THE OLDEST GERMAN TOWN IN

THE SUNKEN FORESTS OF NE

COMMUNICATIONS:—

The Vault of the Albany

NOTES AND CLIPPING.

BUILDING INTELLIGENCE.

(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

- 249,171. AUTOMATIC FIRE-EXTINGUISHER. — Frederick Grinnell, Providence, R. I.
- 249,172. PIPE-FITTING. — Frederick Grinnell, Providence, R. I.
- 249,209. RASH-FASTENER. — Charles E. Steller, Milwaukee, Wis.
- 249,215. SOLDERING-COPPER. — Samuel Woodhead, West Troy, N. Y.
- 249,229. SOLDERING-IMPLEMENT. — John Doyle, Hoboken, N. J.
- 249,236. FIRE-EXTINGUISHER. — Charles L. Gardfield, Albany, N. Y.
- 249,239. ASBESTOS ROOF PAINT OR COMPOSITION. — Frederick M. Hibbard, Goshen, Ind.
- 249,259. FASTENER FOR HANGING-RAILS OF RAILROADS. — Thomas H. Miller, New Haven, Conn.
- 249,263. DOOR-SPRING. — Patrick K. O'Leary, Boston, Mass.
- 249,269. SKREW-TRAP. — Alexander and Ralph Robb, Brooklyn, N. Y.
- 249,304. LOCK-HINGE. — Charles B. Clark, Detroit, Mich.
- 249,306. MORTISING-MACHINE. — Frank S. Clark, Baltimore, Md.
- 249,308. CHIMNEY. — Leonard E. Clawson, San Francisco, Cal.
- 249,315. EXPANSIBLE WEDGE FOR OPENING SAW-KRIPS. — Coulter C. Delemire, Fowler, Mich.
- 249,325. ELEVATOR. — David Edwards, Cardiff, County of Glamorgan, Wales.
- 249,339. FILTER. — Almon M. Granger, Boston, Mass.
- 249,364. REVERSIBLE SPRING-HINGE. — George M. Jewett, Unionville, Conn.
- 249,391. WATER-CLOSET. — Michael J. O'Reilly, Buffalo, N. Y.
- 249,394. PIPE-WRENCH. — Isaac B. Potts, Columbus, Ohio.
- 249,397. INVERT-BLOCK FOR SEWERS. — Gustavus W. Kader, New York, N. Y.
- 249,400. STREET-CURB. — Wm. Roddall, 10 South St., Finsbury, England.
- 249,416. FIRE-LADDER. — Samuel M. Stewart, Rochester, N. Y.
- 249,428-429. MANUFACTURE OF PANELS, SLABS, AND OTHER ARTICLES FROM OXIDIZED OIL. — Frederick Walton, Heatham House, Twickenham, County of Middlesex, England.
- 249,430. BURIAL-ALARM. — Hiram H. Ward, Packwaukee, Wis.

SUMMARY OF THE WEEK.

Baltimore.
BUILDING PERMITS. — Since our last report fifteen permits have been granted, of which the following are the more important: —
 Louisa Hoffman, three-story brick building, No. 183 Orleans St., near Bond St.
 K. C. Just and Wm. Weigel, two-story brick building, 30 on St. Peters St., commencing on St. Peter St., 1 on St. Peter St., in rear of the above.
 Decker St., between Federal St. and Jones' Falls. J. Casey Barry, three-story brick building, 15' x 36', 4' each, Division St., between Wilson and McMechin Sts.
 J. Casey Barry, two-story brick buildings, 12' x 38' each, Kitting St., between Wilson and McMechin Sts.
 Brown Memorial Church, three-story brick parsonage, Park Ave., adjoining the church.
WAREHOUSE. — Mr. Henry Whyte is having erected a four-story brick and stone warehouse 27' x 130' on German St., near Mercer St., the building will be 22' 6" x 74' 6" constructed of brick, stone and terra-cotta, will have three stories and a basement; cost about \$20,000.
CARTRIDGE-HOUSE. — Messrs. Denny and Mitchell are about to erect a three-story carriage-house on the lot, 815 West Baltimore St., between Carey and Republic Sts. The building will be 30' x 165', faced with pressed brick and stone, and cost about \$12,000; Mr. John Walters, superintendent; Mr. George Archer, architect.
CHURCH. — Mr. Geo. Archer, architect, has prepared drawings for the Abbott Chapel, (Presbyterian), Highland Avenue, Baltimore. The edifice will be 44' x 106', built of pressed brick and stone, and cost about \$15,000.
CHURCH. — The corner-stone of the new building of Epworth Independent Methodist Church, cor. of Gilmore and Mosher Sts., was laid Thursday afternoon, Nov. 10. The structure will be in the Norman Gothic style. It will have a frontage of 61' 2" at corner will have a lofty tower and steeple. The basement will be built of local bluestone, with granite finish; the upper part of the building will be of brick, with red sandstone finish. The church will

have seating capacity for 700 persons; cost, \$45,000; Messrs. W. T. Markland and Bro., builders; Mr. Chas. L. Carson, architect.
Houston.
BUILDING PERMITS. — Wood. — Walnut Park, near Walnut Ave., for W. D. Cotton, dwell., 40' x 46', ell, 15' x 3', two-story; Andrew Anderson, builder.
 Albion St., rear of near Ashmont St., for Frank Wood, stable, 26' x 41', two-story; John F. Haines, builder.
 East Fourth St., No. 864, for Hannah C. O'Neill, slipper manufactory, 18' x 40'; J. F. Tighe, builder.
 Broadway St., near Dudley St., for Geo. W. Smith, 2 dwell., 30' x 38', two-story; John Horsfield, builder.
 Adams St., near Milton St., for Mrs. Harriet M. James, dwell., 24' x 33', ell 18' x 20', two-story hip; Henry P. Oakman, builder.
 Ashmont St., near Albion St., for Franklin King, dwell., 26' 6" x 30', two-story; W. J. Jobbing, builder.
 Forest Hill Ave., rear of near Sanford St., for Nathan S. Clark, storage, 18' x 18' 8"; Fred. M. Severance, builder.
 Washington St., rear of near Codman Ave., storehouse, 21' x 28', for City of Boston.
 Guter St., for Lyman Lock, dwell., 26' 4" x 46' 4", three-story; Lyman Lock, builder.
 Spring Park Ave., near A St., for Geo. M. Harding, dwell., 23' x 36', two-story.
 Wareley St., cor. Western Ave., for Old Engine-house S. S. Co., church, 38' x 43'; Kelly & McKinnon, builder.
 Farnham St., rear of near Gerard St., storage, 40' x 60', for G. W. & F. Smith Iron Co.
 Allston St., cor. Stark St., for A. W. Tice, dwell., 34' x 35'; Chas. Stinson & Co., builders.
 Wareley St., near Market St., for Roderick Ellis, 2 dwell., 15' x 41', two-story; Stephen Ellis, builder.
 Lamartine St., opposite Spring Lane, for Martha Nelson, 2 dwell., 22' x 30', two-story; D. G. Drew, builder.
 Heath Pl., rear of for Frank Hubner, stable, 16' x 21', two-story; F. A. Schell, builder.
 Parkman St., near Dorchester Ave., for Mrs. Hiram Hatcher, dwell., 29' x 30', two-story, and dwell., 29' x 38', two-story; Mead, Mason & Co., builders.
 Island St., near Magazine St., for Mather & Wells, for manufacture of fireworks, 32' x 40', two-story; Wm. Morse, builder.
 Seaverns Ave., near Alfred St., for D. S. Smalley, 2 dwell., 21' x 38', two-story; Joseph Hammer, builder.
 Alfred St., near Chestnut St., for Caroline E. Skinner, 2 dwell., 20' x 22', and dwell., 23' x 32', three-story; John D. Wester, builder.
 Savin St., near Warren St., for Jos. F. Pray, 23' x 49', two-story; Henry J. Bartlett, builder.
 Trull St., near Hancock St., for Franklin King, dwell., 28' 6" x 29', two-story; Edward McKee, builder.
Brick. — St., rear of, for N. Y. & N. E. R. Co., sand-house, 25' x 44', two-story; H. H. Graham, builder.
 Unnamed Pl., off Union Ave., for E. Star, tenant, foundry, 78' and 102' 6" x 160', ell, 32' x 68' 8"; Wm. Cole, builder.
 Marlboro St., near Exeter St., for Josiah Bradlee, dwell., 30' x 57', four-story; Vinal & Dodge, contractors.
 Commonwealth Ave., near Hereford St., for Frank N. Thayer, 37' 7" x 60', three-story; J. W. Tobey, builder.
Belford St., Nos. 72-78, for Rob. Barnard and J. J. Richards, mercantile, 22' 6" and 78' x 71' 6" and 169' 6", two-story; Fossenden & Libby, builders.
Armory St., rear of near Codman Ave., mechanical; C. G. Burgess & E. H. Perry, 28' x 100', three-story; Marshall Livermore, builder.
Brooklyn.
BUILDING PERMITS. — Hooper St., s. s., about 150' x 150' on Hooper Ave., 2 two-and-a-half-story stone dwellings; cost, \$12,000; owner and builder, John McQuade; architect, W. H. Gayler.
 Central Ave., s. s., 60' x Troutman St., 2 three-story frame tenements; cost, \$4,000 each; owner, Mr. Singer, Troutman St., near Central Ave.; builders, Mr. Platz and J. Rueger.
 Greene Ave., s. s., 100' x Nostrand Ave., 5 three-story brownstone dwellings; cost, \$7,000 each; owner, Spencer Aldrich, 200 Broadway, New York; architect and builder, Wm. J. Rider.
 Greene Ave., s. w. cor. Nostrand Ave., 5 three-story brownstone dwellings; cost, \$7,000 each; owner, Chas. M. Marsh, 461 Washington Ave.; architect and builder, Wm. J. Rider.
 Henry St., s. w. cor. President St., four-story brownstone flat and store; cost, \$10,000; owner, E. L. Donnellon, President St., near Henry St.; architect, R. Dixon; builder, W. C. Donnellon.
 South Elliott Pl., w. s. 90' x Hanson Pl., three-story brownstone dwellings; cost, \$8,000; owner, Mary Magilligan, 30 St. Marks Ave.; builder, John Magilligan.
 Jackson St., s. s., 150' x Ewen St., four-story brick factory; cost, \$7,000; owner, Valentine & Co., 323 Pearl St., New York; architect, E. E. Raht; builders, J. D. Anderson and John Lee.
 Washington Ave., Nos. 425 and 427, between Greene and Gates Aves., 2 three-and-a-half-story brownstone dwellings; cost, \$14,000; owner, etc., D. H. Fowler, 14 Vernon Pl.; architect, A. Hill; builder, T. Baker.
 Berkeley Pl., s. s., 100' x Seventh Ave., three-story stone dwellings; cost, \$10,000; owner, etc., Wm. Flanagan, 335 Ninth St.
 Hoyt St., w. s. 74' 10" x Carroll St., two-story brick stable; cost, \$2,500; owner, James Chaso, 284 President St.; architect, Stanley S. Covert.
 North Third St., Nos. 91 to 97, five-story brick cop-per shop; cost, \$55,000; owner, Paul Weidmann, 93 South Ninth St.; architect, A. Herbert.
 Tompkins Ave., No. 378, w. s., 60' x Putnam Ave., three-story brick flat; cost, \$5,000; owner, Samuel L. Van Brunt; builder, Wm. H. Barhaus.
ALTERATIONS. — Fulton St., No. 279, repair damage by fire; cost, \$2,000; owner, — Plato; architect and builder, John Rea.
 Bergen St., Nos. 20 and 22, two-story brick extension;

cost, \$2,000; owner, Estate D. K. Ducker, Fulton St.; architect, Wm. Taylor; builders, Peter Kelly, Son and K. F. Whipple.

Chicago.
BUILDING PERMITS. — Washington Ice Co., two-story brick ice house, 30' x 67', 379 Thirty-first St.; cost, \$3,000.
 Albert Albrecht, one-story brick cottages, 20' x 34', 733 North Ashland Ave.; cost, \$500.
 G. A. Wrisley, additional st'y on soap factory, 30' x 50', Kingsbury and Superior Sts.; cost, \$2,500.
 Robert Falk, one-story brick store front addition, 678 Thirty-first St., 22' x 34'; cost, \$1,000.
 P. O. Lundstrom, 2 two-story and basement brick dwellings, 43' x 56', 325 and 327 Mohawk St.; cost, \$8,000.
 Sarah Woods, basement, 21' x 37', 165 Henry St.; cost, \$700.
 Chas. Segers, two-story and basement brick dwell., 27 Mohawk St.; cost, \$1,800.
 J. Schaefer, one-story brick additional store, 20' x 40', Huribut St., near North Ave.; cost, \$500.
 Geo. Serek, one-story brick cottage, 20' x 50', 217 Thirtieth St.; cost, \$1,600.
 J. Straube, one-story brick cottage, 20' x 28', Keely and Lyman St.; cost, \$800.
 James O'Connor, one-story brick cottage, 18' x 22', Emerald Ave. and Twenty-ninth St.; cost, \$3,000.
 R. Smith, one-story brick cottage, 22' x 40', 153 Ashley St.; cost, \$1,000.
 John A. Seaman, two-story brick dry-room, 26' x 60', Hoyne and Ferdinand Sts.; cost, \$2,000.
 Charles Stauffer, one-story brick cottage, 20' x 36', Butterfield and Twenty-second Sts.; cost, \$500.
 George M. Clark, three-story and basement brick livery stable, 50' x 100', 321 and 323 North Clark St.; cost, \$11,000.
 A. Schermann, brick basement, 20' x 42', 70 West Division St.; cost, \$800.
 Hill & Co., one-story brick boiler-shop, 58' x 63', 341 and 343 Canal St.; cost, \$1,500.
 Aug. Hilm, one-story brick cottage, 20' x 32', 629 West Eleventh St.; cost, \$600.
 Maxwell Bros., one-story brick, 38' x 100', Loomis and Human Sts.; cost, \$1,000.
 E. H. Castle, one-story brick, 20' x 28', 12 Paulina St.; cost, \$500.
 M. Meyersheid, brick basement, 20' x 100', 140 North Ave.; cost, \$700.
 C. J. Adams, 2 one-story brick cottages, 20' x 30', Main St., near Thirty-first St.; cost, \$1,600.
 A. C. Ellilhorpe, brick basement, 23' x 40', 62 Morgan St.; cost, \$500.
 Estate of Daniel Weaver, three-story brick dwell., 26' x 60', Eldridge Court, near State St.; cost, \$6,000.

New York.
BUILDING PERMITS. — Ninetieth St., s. s., 82' e Park Ave., 3 four-story brownstone tenements; cost, each, \$30,000 and \$18,000; owner and architect, St. Murphy, 150 East Sixty-fifth St.
 Lexington Ave., n. e. cor. Fortieth St., three-story brick hospital; cost, \$18,000; owner, Nursery and Child's Hospital, on premises; architects, Thon & Wilson; builders, Sinclair & Mill and Guy Cullen.
 Seventh Ave., n. e. cor. Fifty-fifth St., brick building owner, New York Panormia Co.; architects, J. H. Leman and F. Newkirk; builders, E. D. Connolly & Son.
 Fifty-seventh St., n. s., 222' x Sixth Ave., one stone foundation only for a church; cost, \$10,000; owner, Calvary Baptist Church; architect, D. J. MacInte.
 One Hundred and Twenty-fifth St., s. s., 100' x Ninth Ave., 3 four-story brick apartment-houses; cost, each, \$12,000; owner, Catharine F. Fretsch, 111 West One Hundred and Twenty-fourth St.; architect, D. J. MacInte.
 One Hundred and Twenty-fifth St., s. s., 400' e Eighth Ave., 2 four-story stone stores and tenements; cost, \$15,000 and \$30,000; owner, Helen M. Blaisdell, 48 East One Hundred and Twenty-fourth St.; architect, J. G. Frague.
 One Hundred and Twenty-fifth St., s. s., 400' e Eighth Ave., 2 four-story brick and stone apartment-houses; cost, each, \$15,000 and \$30,000; owner and architect, same as last.
 One Hundred and Fifth St., n. s., 200' x Ninth Ave., 2 four-story brick and stone stores and tenements; cost, \$10,000; owner, Home for Aged and Infirm Hebrews, 710 East Fourteenth St.; architects, D. & J. Jardine.
 One Hundred and Thirty-third St., s. s., 100' x Lincoln Ave., two-story brick and iron moulding and planing mill; cost, \$1,700; owner, John Davidson, Broadway Bank Building; architect, W. H. Walton, builder, Jno. Knox.
 One Hundred and Twenty-third St., s. s., 100' e Sixth Ave., 3 three-story brownstone dwellings; cost, each, \$12,000; owner, Samuel H. Bailey, 186 East One Hundred and Fourth St.; architect, Chas. Baxter.
 Seventy-seventh St., n. s., 375' e Second Ave., four-story brownstone tenement; cost, \$9,000; owner, Patrick Key, 322 East Seventy-eighth St.; architect, A. B. Ogden.
 First Ave., s. e. cor. Seventy-ninth St., four-story brownstone store and apartment-house; cost, \$20,000; owner, Mrs. Annie E. Kelly, 404 East Eighty-second St.; architect, J. C. Burne.
 Seventy-ninth St., n. s., 325' e Third Ave., four-story brownstone apartment-house; cost, \$19,000; owner, Mrs. Sarah T. McCool, 312 East Fifty-seventh St.; architect, J. C. Burne.
 One Hundred and Thirty-seventh St., n. e. cor. College Ave., one-story brick factory; cost, \$10,000; owner, J. L. Mott Iron Works, 312 Fifth Ave.; architects, Babcock & McAvoy.
 One Hundred and Tenth St., n. s., 120' e Third Ave., 4 four-story Connecticut brownstone dwellings; cost, \$14,000; owners, John Cullen and Michael Kelly, 207 East One Hundred and Sixth St.; architect, Chas. Baxter.

(Continued on next page.)

SUMMARY: —
 The Fifteenth Annual Convention of Architects — Fall of a New Removal of Chief Building in New York. — Burning of Underground Telegraph. — Lighting of the Paris Opera. — More about the Zulu Indians. — The French Provincial Museum. — An Inter-continental Railway. — THE FIFTEENTH ANNUAL CONVENTION OF ARCHITECTS. — THE COMPETITION IN WALL-PAPER. — REPAIRS OF MASONRY. — THE ILLUSTRATIONS: — The "Fairbanks House," Ded. — Tower of Department. — Design for Town Hall, Du. — LEGAL NOTES AND CASES. — THE NEW YORK UNDERWRITERS' ENGLISH GOVERNMENT ARCHITECTS. — SANITATION IN ANCIENT ROME. — THE LAW OF COPYRIGHT. — COMMUNICATIONS: — Calling Warehouse Floors. — Wrought-Iron. — Quantity. — Timbered Work. — The V. NOTES AND CLIPPINGS.

The Fifteenth Annual Convention of Architects closed November harmonious meeting. The Convention as well attended as usual, and were decided, or even discussed favorable condition for such whole, the past year has been. The individual chapters have was anticipated from the relation them with the national body effect of removing the Institution higher and less familiar spirit organization, and perhaps so it was intended to apply its Latrobe of Baltimore, was of Convention memorable. A son of the man to whom classic beauty which distinguishes tectural history of the place trace their artistic development Washington, but every piece and elucidate the account Latrobe's paper will become

SOME days ago two houses fell with a frightful crash, persons, of whom five or six many more suffered severe in brick foundations, and brick high above the sidewalk. ground floor had been removed and girders, while openings built in the rooms above, recognizable. The first was some six weeks before the first seam in the party wall, and consultation, had reported the of buildings, but without any ening of the structure by built was known to be badly complicated the circumstances

So far as the occupants are concerned, everything seems expected; but the apparent Buildings to take any notice for a long time unexplained containing the particulars by a clerk in the office of Mr. him placed in a certain pigeon

of warming their chilled bodies. We never saw a very "elaborately or elegantly" furnished asylum, but when the one in question is rebuilt, we might suggest that the inmates, at least, would probably be glad to forego the small portion of the cost of such luxuries which would be needed to place such a structure and its occupants entirely beyond the reach of similar fright and suffering for the future.

THE Mutual Union Telegraph Company, forbidden to erect poles in the streets of Chicago, has submitted to the restrictions imposed upon it and is now engaged in laying underground wires, insulated in the most thorough manner which could be devised. Lead pipes are employed as conduits for the wires, of which twenty, encased in glass tubes, are placed in each length of pipe, and the whole grouted, so to speak, with a waterproof and insulating compound of rosin, wax, and other substances, melted and poured into the end of the tubes. The wires are left somewhat longer than the pipes, so as to admit of connection with the next set at each end. Four miles of this costly conduit have already been laid, from the city line to the centre of the business quarter, and the Mutual Union Company will probably in the end reap the benefit of its thorough method of proceeding by the great economy in the expense of maintenance and repair of such a line. Whether the insulation will be sufficiently effective to make such conduits available for telephone service remains to be seen. If so, their use must extend rapidly.

The experiment of lighting the Grand Opéra in Paris with electricity appears to have been completely successful. The lamps all worked properly, and the only complaint heard from the spectators was that the rooms were too brilliantly illuminated, so that their eyes were dazzled, and nervous ladies suffered from headaches, in consequence, they thought, of the excessive radiance. For the first time, the ceiling of the grand foyer was so brightly lighted as to make Baudry's famous paintings distinctly visible, and also, unfortunately, to show clearly the havoc which the smoke from the gas-burners has already wrought upon them. To other portions of the decoration the electric lamps gave new and strange effects. The sculpture, by the unusual contrast of the shadows, was brought out with great prominence, but had a harsh, unnatural look, and the colors of the paintings assumed new relations. The ceiling of the auditorium, for example, perhaps partly on account of its position over the great chandelier, appeared almost black, and would have interfered materially with the general brightness if the precaution had not been taken to place a circle of seventy-two Jablochhoff candles just beneath it. Throughout the building gas was freely burned in conjunction with the electric lamps. Not only was it necessary to light the interior of the boxes by means of the accustomed brackets, but in several places the gas was purposely employed to moderate the excessive whiteness of the electric light. The cost of the illumination was far greater than that of gas lighting alone, but expense is not much regarded in providing for the Grand Opéra, and the experiments are to be continued.

MR. FRANCIS H. CUSHING, to whose self-sacrificing labors in studying the character and customs of the Zúñi Indians we have already adverted, sends some letters, which are quoted in the Boston *Herald*, describing his successful efforts to gain admission to the more closely guarded ceremonies of the tribe. Already adopted as an Indian in full standing, and even made commander of the military force of the pueblo, he had never been allowed to take part in certain warlike ceremonies which appeared to him particularly important and interesting. The essential pre-requisite for leave to witness them was, he soon discovered, the presentation of a scalp, marking the applicant as worthy to bear knightly honors, and as certain scruples stood in the way of procuring this for himself, his wishes might have been entirely frustrated, had not the Apache insurrection put him in possession of the needful offering, which, not without some difficulty, was accepted, and he was solemnly initiated into the chivalric order of the Eagles. The initiation ceremonies were the reverse of pleasant, but Mr. Cushing's enthusiasm, and the satisfaction of gaining at last the knowledge which had so long been kept from him, encouraged him to endure the worst, and after nearly two weeks probation he was informed that the ordeal was over. The extraordinary experiences of this courageous young student certainly form the very romance of archaeology, and the relation of them will, we hope, some time form a volume of great and permanent interest.

AN important change is proposed in the relations of the French government to art and artists by M. Jules Ferry, minister of Fine Arts and Public Instruction. According to M. Ferry the interests of provincial museums and schools of art will be promoted by a closer connection with the central administration than they now enjoy, which will afford opportunity for carrying out comprehensive measures, and for establishing constant and free interchanges between the different portions of the country, without waiting for the coöperation of a large number of independent local functionaries. The plan proposed has a little the air of being modelled after the English system, which makes the Department of Science and Art, with head-quarters at South Kensington, the supreme authority in all matters within its province, establishing its own rules in all public schools of art throughout the kingdom, prescribing the selection of teachers, and conferring rewards, besides superintending local exhibitions of pictures or statuary, and lending for such purposes the treasures of its own collection at the metropolis; but the South Kensington administration, whatever criticism it may have deserved for some arbitrary and perhaps injudicious acts, has done wonders for the artistic development of England, and it is only natural that the French should be anxious to imitate, and if possible to surpass their rivals across the Channel. By M. Ferry's proposed measure, the government administration of fine art would be divided between two permanent officials, one bearing the title of Director of Museums and Instruction in Art, having under his orders the three bureaux of Museums, Schools of Design, and Schools of Lyric and Dramatic Art; while the other, under the name of Director of Works of Art, would control the four bureaux of National Manufacture, Historic Monuments, Finance, and Public Artistic Works. If it should be adopted, M. Louis de Ronchaud, at present Secretary of the administration of Fine Art, would be made Director of Museums and Instruction, while M. Jules Pointu, now prefect of the department of Haute-Marne, would be Director of Works of Art.

MR. HINTON ROWAN HELPER, of St. Louis, a gentleman once noted for his political writings, has undertaken to advocate the construction of a railway extending through almost the entire length of the Western continent, from the Canadian frontier to the extremity of Cape Horn. The traffic over this route would require, he thinks, a double track, laid with steel rails and bordered by a telegraph line, and the cost he estimates at about one hundred million dollars. To show his sincerity in promoting this extraordinary enterprise, he offers out of his own pocket a prize of five thousand dollars for the best essay on the subject which shall be published in America within six months after the announcement of the offer. We think it may be safely predicted that none of our readers will ever see the accomplishment of this undertaking. It is possible that a railroad along the central meridian of the United States might sustain itself against the competition afforded by the river navigation of the Mississippi; and it is not improbable that a single line between the United States and Mexico may be made to pay dividends, but from the environs of the City of Mexico for three thousand miles southward stretches an unbroken and almost uninhabited forest. Such settlements as Central and South America possess are almost without exception near the coast, but Mr. Helper's railroad is, we are told, intended to avoid the sea, and penetrate as nearly as may be the centre of the continent, where it would be sheltered from the Chilians and Peruvians on one side by the impassable range of the Andes, and from the Brazilians on the other by an endless jungle. Beyond the tropical forests the road would reach the unexplored deserts of Patagonia, concerning the habits of whose inhabitants enough is at least known to make it certain that their commerce with the United States does not yet require a double-track railway. Every successful railroad ever built has followed some track already well beaten by other modes of travel. The Pacific roads followed a trail strewn with the bones of emigrants and oxen; the Saint-Gothard tunnel pierces the mountain over which thirty thousand persons every year are dragged in diligences or toil painfully on foot, but of travel through the length of Central and South America there is none whatever. If any one thirsts to be the pioneer in the construction of another trans-continental railway, either of the two great caravan routes of Africa, from Morocco to Timbuctoo and the Niger, or from Zanzibar by Unyanyembe and Ujiji to the Congo, afford a prospect of success and profit which is wholly wanting to Mr. Helper's project.

THE FIFTEENTH ANNUAL CONVENTION OF THE AMERICAN INSTITUTE OF ARCHITECTS.

THE Fifteenth Annual Convention of the American Institute of Architects has met, transacted reports, addresses, and other business, and is now adjourned. There have been many members, coming from Boston, Baltimore, Wheeling, Nashville, Washington itself. There is a large attendance from the intelligent public, and the members of the profession not yet good part of the time, there are many persons. Among these the honorable Mr. Corcoran, who is contemporary, — it was said.

But Mr. Latrobe, though he seemed twenty years younger, indeed would think of stigma in manner were as animated a prime of life. Animated and he said it with the grace of a school. He began by frankly days of the Capitol must be his father's work upon it; forestall criticism. The fact that sufficiently established nothing, as there was no occasion that could suggest that he was. The personal element served, at the moment, and to give address was received. Mr. Corcoran set of drawings, illustrating paper, which the Convention at noon.

Meanwhile the time was of the Board of Trustees, of minutes. Of these the first was important, and the Convention, to learn how much work they have had to do, and how reports of the Chapters did not Boston Chapter being the only one late itself upon an increased Committee on the Duties of a time. The Committee on Education, Professor Sturgis, matters as they had personal warding from the prairies, well digested account of the the Architectural Department, paign, Ill., an invaluable contribution, and apparently successful expository practice in such teaching which the details of the instruction performed by the students of work of permanent value made a marked impression. School of Mines of Columbia, the Institute of Technology, on occasion to dispel any anxiety might have, lest, being so near, and the prosperity of one might made sufficiently to appear to the qualifications and attendance that they virtually addressed students, both equally desiring different things. He also insisted these three schools might and of the others, testifying at the dial personal relations among course such coöperation would.

A handsome and comfortable high terminated the exercises for the visits to the public building noon's work. After four o'clock could be seen, with the exception, which, by Mr. Corcoran's expression, Convention after the regular light lasted.

The second day was given of which was Mr. J. T. Clark, peets of the Discoveries of the under his direction. This was quite line drawings, made ward by Professor Norton work undertaken and in great condition was a complete surprise the greatest interest. Mr. G. paper on Queen Anne work, and critically, and with sens

BUILDING INTELLIGENCE.

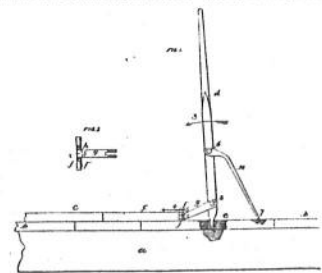
(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

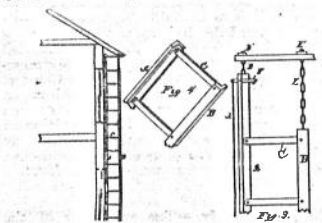
[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty cents.]

248,915. FLOOR-CLAMP.—John A. Brown, Marlborough, Mass. This invention relates to an apparatus for pressing floor-boards together before nailing them down; and it consists of a lever having a sharp point to be driven into the under floor or floor-beam to act as a fulcrum, combined with a bearing-block



connected with this lever to press against the edge of the floor-board. The invention further consists in the combination, with the lever and bearing-block of a pawl to retain the lever in position after it has been used to press together the floor-boards, so that the lever will not require to be held by the workmen while the boards are being nailed.

248,907. FIRE-ESCAPE.—George A. Phifer, New Richmond, O. The object of this invention is to provide a simple, cheap, and effective fixed fire-escape, and it consists of a ladder, one side bar of which, of the form shown, is secured to the building; the other side bar, of like form, being connected with the stationary side bar by rounds hinged at each end to permit the outer side bar to fold up onto the stationary bar. A, represents the inner side bar of a ladder which is secured vertically against the building by the side of a tier of windows, and may extend down to the ground, or only to the second story of the building. This side bar reaches to the roof of the building and hangs on a chain or rod, D, secured to the block, D'. Cross-bars C are hinged at their inner ends to the pro-



jecting flange of the angle-iron bar A, and their opposite ends are in like manner hinged to the flange of the outer bar, B. This outer bar is also secured to the cornice by a chain, E, and block F, but is somewhat shorter than the inner bar. The object of this is to permit the bar B to swing up to clear the cornice. A trigger, F, is secured to the upper end of the inner bar, and a rod, G, is connected with this trigger, and extends down alongside of the inner bar. The operation is as follows: When not in use the outer bar, B, is folded up against the inner bar, A. The rounds or cross-bars C are thus disposed vertically within the hollow formed by the junction of the two angle-iron bars. The trigger F serves to thus hold them together. When the rod G is drawn downward, it causes the trigger F to release the upper end of the outer bar, which then descends until the chain E is taut. The ladder thus formed being at the side of a tier of windows, the occupants of the adjacent rooms can easily escape in case of fire.

249,727. ROOF-BRACKET.—Sumner F. Black, Wellington, O.
249,745. WINDOW-GLASS.—Samuel Darling, Providence, R. I.
249,749. MACHINE FOR SHEARING METAL.—Bernard Gallagher, St. John, New Brunswick, Can.
249,757. SCAFFOLD.—George W. Green, Wakenau, Washington, D. C.
249,761. DOOR-CHECK.—Charles Hassinger, Plymouth, Mich.
249,764. WINDOW SCREEN ATTACHMENT.—Bernard T. Harold, Stockton, Cal.
249,767. WATER-CLOSET.—Elias S. Hutchinson, Washington, D. C.
249,784. GAUGE FOR MORTISING-MACHINES.—George L. Muhn, Wheeling, W. Va.
249,789. LOCK.—Emery Parker, New Britain, Conn.

249,790. SASH-PULLER CORD GUARD.—C. J. Schaeckly, Marlborough, W. Va.
249,805. WOOD-PLANING MACHINE.—Albert W. Stossmeister, Newport, Ky.
249,813. AUTOMATIC FIRE-EXTINGUISHER.—Francis W. Whiting, Chelsea, Mass.
249,821. COMBINATION-SQUARE.—Stephen H. Belows, Athol, Mass.
249,830. ARTIFICIAL STONE.—Julius Iron, Philadelphia, Pa.
249,846. FIRE-ESCAPE.—Ranald Macdonald, Brooklyn, N. Y.
249,847. FIRE-ESCAPE APPARATUS.—Ranald Macdonald, Brooklyn, N. Y.
249,854. HEATING-STOVE.—James A. Milliken, Biddeford, Me.
249,856. PRESERVING WOOD.—Samuel R. Percy, New York, N. Y.
249,878. TRAP-VALVE.—Cornelius Birkery, Hartford, Conn.
249,902. VARNISH.—Martin Connelly, Philadelphia, Pa.
249,903. WATER-CLOSET.—William S. Cooper, Philadelphia, Pa.
249,945. UNDERGROUND STREET.—Noah Jacobsohn, New York, N. Y.
249,951. BLIND-SLAT-TENONING MACHINE.—Mathias M. Kitz, Oshkosh, Wis.
249,956. CATCH-BASIN VALVE.—John B. Laumann, Cincinnati, O.
249,966. PIPE-CUTTING IMPLEMENT.—Francis I. Maule, Philadelphia, Pa.
249,968. PIPE-WRENCH.—Timothy D. Merdan, Buffalo, N. Y.
249,982. BURGULAR-ALARM.—Francis W. Pearson, Boston, and Andrew M. Eastman, Somerville, Mass.
249,987. BRICK-PRESS.—William W. Potts, Bridgeport, Pa.
249,997. BENCH-PLANE.—George F. Sawyer, Liberty, Tex.
250,029. PIPE-TONGS.—Delos Worden, Oil City, Pa.
250,044. (Reissue.) COMBINED ANVIL, VISE AND DRILL.—Joseph L. Ware and W. Scott Fleming, Pine Island, Minn.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—Since our last report fifteen permits have been granted, of which the following are the more important:—
Foss & Gorman, 3 two-story brick buildings, O'Donnell St., beginning 60' w of Chesapeake St.
Foss & Gorman, 3 two-story brick buildings, Benney St., beginning 60' s of Dillon St.
Foss & Gorman, 3 two-story brick buildings, Harris Alley, s of Dillon St.
Archibald Teal, 3 three-story brick buildings, Patterson Park Ave., between Pratt and Gough Sts.
Henry Mylander, 2 three-story brick buildings, Edmondson St., between Fremont and Schroeder Sts.
Dr. E. D. Loughery, three-story brick building, 20' x 60', s e cor. Gay St. and Jones Falls.
John E. Armiger, 15 two-story brick buildings, Eager St., between Washington and Wolf Sts.
Female Christian Home, two-story brick stable, 28' x 32', Pearl St., between Mulberry and Franklin Sts.

Boston.

BUILDING PERMITS.—Brick.—13 and 15 Milford Pl., for John Deery, 2 dwells, 20' x 46', three-story; John Poulter, builder.
249 Friend St., for Thomas Wigglesworth, carriage house, 28' x 72' 6", three-story; David Perkins, builder.
Huntington Ave., near Dartmouth St., for John F. Mead, 4 family hotels, 45' x 80', five-story; John F. Mead, builder.
Wood.—Vaughan Ave., near Geneva Ave., for Michael J. Hurney, dwelling, 22' x 28', two-story; Yates & Ryan, builder.
Hallett St., near Station St., for G. F. Burkhardt, cooper shop, 45' x 60'; Rumrill & Stanton, builders.
Hartford St., near Sargent St., for Alonzo P. Clifford, dwell., 26' x 31', two-story; Alonzo P. Clifford, builder.
Keyes St., for Ferdinand Kelly, dwell. and store, 22' x 32'; John Gately, builder.
Dorchester Ave., near Blake St., for John Southern & Co., building for storage and setting up of machinery, 33' x 80'.
East Sixth St., near N St., for Boston Cordage Co., storage building, 40' x 108'; Scott Bros., builders.
Harvard Ave., near Brighton Ave., for Charles Armstrong, dwell., 30' x 39'; Samuel Davenport, builder.
Unnamed Place, off School St., for Mrs. E. A. Hunt, dwell., 28' x 30'; W. H. Bowker, builder.
Rutherford Ave., opp. Winchester St., for Eastern R. R. Co., hay storage, 60' x 405'; H. Bissell, builder.
Perkins St., rear of, near Prince St., for Wm. Wallace, ice-house, 105' x 232'.
Marginal St., rear of, near Orleans St., freight storage, 170' x 416' and 210' x 530'; H. Bissell, builder.
Columbia St., near Quincy St., for Aaron W. Spencer, stable, 48' 2" x 36' 4".
O St., near East First St., stable, 22' x 80', for Walworth Mfg. Co.
Unnamed Place, off School St., for Mrs. E. A. Hunt, dwell., 45' x 80'; W. H. Bowker, builder.
Unnamed Place, off School St., for Mrs. E. A. Hunt, dwell., 15' x 100'; W. H. Bowker, builder.
Harvard St., nearly opp. Wales St., for George E. Bailey, dwell., 48' 2" x 33' 6".
Washington St., near Atherton Ave., for C. H. Heissling, dwell., 27' x 30'.

Brooklyn.

BUILDING PERMITS.—Lexington Ave., n e cor. Throop Ave., three-story brick store and dwell., and two-story brick dwells; total cost, \$35,500; owner, C. Ritchie, 18 Court St., room 3; builder, E. T. Hatch.
Prospect Ave., s e 80' w Fifth Ave., 6 three-story brick stores and tenements; cost, \$5,000 each;

owner, Daniel Doody, 598 Fifth Ave.; builder, Peter Donlon.

Greene Ave., n w cor. Throop Ave., 3 three-story brownstone dwells; cost, \$4,800 each; owner, M. A. DeLeverre, 436 McDonough St.; builder, G. DeLeverre, Troutman St., No. 49, two-story frame tenement; cost, \$2,500; owner, G. Shellwald, 22 Stanhope St.; builder, E. C. Bauer.

Franklin St., Nos. 37 and 39, w s 50' from Quay St., one and two-story frame foundry; cost, \$2,800; owner, etc., James N. Balston, 124 Noble St.
Quincy St., n s 125' e Throop Ave., 3 two-story stone dwells; cost, each, \$3,500; owner, A. E. De Baum, 54 Fine St., New York.
Adams St., on pier at foot of two-story frame coal pocket; cost, \$5,300; lessee, Eastern Transportation Line, New York City; architect, John Forman; builder, E. A. Young.

William St., s s and King St., n s 80' e Conover St., one and two three-story brick shop; cost, \$12,000; owner, The Pioneer Iron Works, on premises; architect, M. Franck; builders, F. Carlin and Geo. Damsen.

Nostrand Ave., w s 97' 9" n Park Ave., one and two-story brick factory; cost, \$7,000; owner, Richard Dupuy; builder, J. Clark.
Atlantic Ave., n s 50' w Boerum St., 2 one-story brick stores; cost, \$6,500; owner, Wm. C. Schermerhorn, 49 West Twenty-third St., New York; architect, W. A. Southard; builder, J. J. Beuten.

Head of Grand St., Newtown Creek, one-story frame factory; cost, \$15,000; owner, Albemarle Fertilizing Co., 60 Cortlandt St., New York; architect and builder, S. M. Weeks.

Leisvic Ave., w s 80' n De Kalb Ave., two-story frame dwell., cost, \$2,500; owner, Anne E. Foley, 922 De Kalb Ave.; builders, John Lambert and M. C. Rush.

ALBEMARLE.—Foot of Thirty-ninth St., two-story brick extension; cost, about \$3,000; owner, H. W. Johns Manufacturing Co., on premises.

Buffalo.

CHURCH.—German Lutheran Church, Elliott St.; cost, \$50,000; builders, Rumrill & Rupp; contractor, Daniel Dutzer.

HOUSES.—Frame dwell., Niagara St., between Pennsylvania and Jersey Sts.; cost, \$5,000; owner, H. J. Tucker; architect, Geo. J. Metzger.

Brick dwell. and barn for Mr. Frank Perow, Sixth St.; cost, \$35,000; architect, Richard A. Waite; builders, J. Heiler & Son.

STORES.—Brick stores, with apartments, Seneca St., near Hydraulic St., 80' x 90'; cost, \$20,000; owner, F. H. Goodyear; architect, Geo. J. Metzger.

Chicago.

BUILDING PERMITS.—The following building permits have been issued since our last report:—

Mary C. Carpenter, two-story brick, rear addition, 20' x 30', 214 Sangamon St.; cost, \$2,500.

John Coughlan, two-story brick flats, 20' x 56', rear No. 78 South Halsted St.; cost, \$3,500.

Union Wire Mattress Co., four-story brick factory, 50' x 108', Erie and Sedgwick Sts.; cost, \$10,000.

Calumet Club, three-story and basement club-house, 80' x 124', n e cor. Twentieth St. and Michigan Ave.; cost, \$149,000.

E. & S. A. Kent, 2 three-story and basement brick stores and flats, 30' x 100', State St., near Sixteenth St.; cost, \$15,000.

E. Olson, two-story brick dwell., 22' x 64', Lincoln St., near Milwaukee Ave.; cost, \$3,000.

M. Sieben, two-story brick store-house, 32' x 40', 235 and 237 Larrabee St.; cost, \$5,000.

Mary Walcott, two-story brick dwell., 20' x 32', 125 East Superior St.; cost, \$2,200.

John Maas, 3 four-story and basement brick stores, 63' x 85', n e cor. Ogden Ave. and Van Buren St.; cost, \$20,000.

D. H. Hammer, 2 three-story and basement brick stores and flats, 48' x 62', 3526 to 3530 State St.; cost, \$15,000.

H. Gillett, three-story brick flats, 25' x 45', 863 North Clark St.; cost, \$4,500.

W. C. Seipp, 2 two-story and basement brick dwells, 45' x 60', 2971 and 2973 Groveland St., cost, \$5,750.

Graham Bros. & Co., four-story and basement brick soap factory, 60' x 170', West Lake St., near Ada St.; cost, \$30,000.

William Bartlett, two-story brick dwell., 21' x 60', Dana Ave., near Thompson St.; cost, \$2,000.

J. Landberger, two-story brick dwell., 21' x 48', 560 Market St.; cost, \$2,900.

Miller & Umbdenstock, one-story brick printing office, 48' x 95', 580 Market St.; cost, \$3,000.

D. E. Pearson, 2 three-story brick dwells, 44' x 83', State and Scott Sts.; cost, \$15,000.

D. K. Pearsons, three-story brick flats, 34' x 40', Scott St., near State St.; cost, \$6,000.

Edwin Walker, two-story brick barn, 32' x 50', rear 2616 Michigan Ave.; cost, \$4,000.

Joseph Vechots, two-story brick dwell., 20' x 44', 360 West Eighteenth St.; cost, \$3,000.

V. Herd, two-story and basement brick dwell., 21' x 55', Throop St., near Twentieth St.; cost, \$3,700.

N. Thomasson, three-story and basement brick dwell., 30' x 74', State St., near Goethe St.; cost, \$12,000.

E. W. Blatchford, stone foundation, 63' x 80', Jackson St., near State St.; cost, \$5,000.

D. Benedict, two-story brick flooring-mill, 50' x 100', Green and Kinzie Sts.; cost, \$5,000.

Armour, Dole & Co., 2 two-story elevators, 120' x 322', Sixteenth St. and Oakley Ave.; cost, \$120,000.

J. Hoehor, three-story brick brewery, 101' x 108', Hinman St., near Ashland Ave.; cost, \$50,000.

(Continued on next page.)

SUMMARY:—
Some Proceedings of the Late Congress of Architects.—The F. A. I. A.—The American Architect's Verdict on the Grand Street Electric Light System.—An Expedition.—The Canals of V. Assos.
PICTURE EXHIBITIONS IN PHILADELPHIA.
CONTINUOUS GUILDERS.
THE ILLUSTRATIONS:—
Plan and Details of the Temple sign for a Hotel Billiard-Room.
OPENING ADDRESS BEFORE THE ROYAL ARCHITECTS.
OFFICERS OF THE AMERICAN INSTITUTE OF HEATING GAS DISTRIBUTION IN ST. COMMUNICATION:—
Dry-Rot.
NOTES AND CLIPPINGS.

Among the interesting matter of the American Institute of a report of the Committee on was taken to recall, by citations the efforts made in former year a first class professional journal although these efforts failed of to keep the subject before the had contributed to the cordial Architect was received by the on this side of the Atlantic, after taken by private enterprise, and of courtesies and good offices between them. In the report Correspondence was contained illustrate the position which the fessional community, and the render. According to the S for some years after the last the younger members and as abroad with letters of introduction and addressed to the eminent professional bodies with whom. Such letters are opening to them the doors of interesting objects, and obtaining in process of construction, hope that the number of applications away to two or three in a year more nearly representing the value which its introduction

AN announcement, which vention, was made to the effect was in process of formation dozen prominent architects for election as Fellows. T try is to be congratulated distance of California from local practice, the peculiar of San Francisco, render the profession in that city of singular materials, the adobe bricks. Oregon pine, the beautiful as much objects of curiosity and builders as the novel against earthquakes, and construction, and an exchange much to enlarge the ideas the continent. Some have unjustly, with being narrowness of its administration that if, after New York has nently suitable for this purpose principally into the hands due much less to any desire

BUILDING INTELLIGENCE.

(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

250,047. **BIT-STOCK.**—Quimby S. Backus, Holyoke, Mass.
250,061. **SPIRIT-LEVEL.**—George Egart, Mooleyville, Ky.
250,063. **HEATING-STOVE.**—Justin R. Graves, Sioux Falls, Dak.
250,060. **SPIRIT-LEVEL.**—Frederic Kraengel, Buffalo, N. Y.
250,061. **SUSPENSION-CLAVIS FOR ELEVATORS.**—Charles M. Mallory, Toledo, O.
250,174. **LOUVER-THIMMING MACHINE.**—W. B. Swartwout, Three Rivers, Mich.
250,186. **BIT-STOCK.**—Loring J. Baker, Boston, Mass.
250,187. **SPIKE.**—Joshua B. Barnes, Fort Wayne, Ind.
250,188. **LIFTING-JACK.**—John C. Beard, Newtonville, Ind.
250,191. **SAWING-MACHINE.**—David Berry, Bolinas, Cal.
250,196. **CURTAIN-FIXTURE.**—William A. Bowyer, Alliance, O.
250,211. **SAW-HANDLE.**—Andrew J. Doane, Indianapolis, Ind.
250,214. **SPRING CURTAIN-ROLLER.**—Benjamin I. Hicks, Brooklyn, N. Y.
250,232. **DOCK-HANGER.**—Sammel Ide, Medina, N. Y.
250,257. **COMPOSITION FOR ARTIFICIAL WOOD ORNAMENTS.**—Olio O. Karsch, New York, N. Y.
250,293. **EARTH-ANODE.**—Wm. J. Sherman, St. Augustine, Fla.
250,312. **TRAVELLING CRANE.**—John Walker, Indianapolis, Ind.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—Since our last report eighteen permits have been granted, of which the more important are as follows:
Henry Pfeil, 2 two-story brick buildings, n e cor. Ostend St. and Burgunder Alley.
Henry Pfeil and Son, two-story brick stable, Wilmer Alley, bet. Lantana and Townsend Sts.
Adams White Lead Co., brick building, 10' x 51', s e cor. East and Cross Sts.
Hannus Distillery Co., one-story brick warehouse, s e cor. Huse and Ostend Sts.
Jno. Burger, two-story brick stable, 13' x 40', Dallas St., bet. Lancaster and Thomas Sts.
Jno. Kuukel, three-story brick building, 30' x 90', Lee St., bet. Light and Lexington Sts.
Baltimore and Ohio R. Co., one-story brick building, 24' x 32', No. 10 Poppleton St., s of Pratt St.
Jno. F. Rositter, two-story brick building, Montgomery St., between Jackson and Carroll Sts.
Jas. McHugh, one-story brick stable, s e cor. Plowman and Front Sts.
Solomon Corner, three-story brick building, n e cor. Calvert and Bladde Sts.

Boston.

BUILDING PERMITS.—Iford, — Elm St., near Ford St., for Andrew Crow, dwell., 18' x 22'; Thomas Yeomans, builder.
Clarence St., Nos. 30 and 32, near Dudley St., for Benj. F. Bean, two-story and mansard dwellings, 19' x 42'; Benj. F. Bean, builder.
Wendover Ave., Nos. 23 and 31, near Dudley St., for Benj. F. Bean, two-story and mansard dwellings, 19' x 42'; Benj. F. Bean, builder.
East Third St., near L St., for Alfred Rogers, stable, 20' x 30'.
Brick.—No permits for brick buildings have been issued during the past week.
NOVEMBER REPORT.—The following permits were issued at the office of Inspector of Buildings during the month of November: brick, 18; wood, 7; repairs, etc., 213; boilers and engines, 42; heating apparatus, 116.
STORAGE WAREHOUSE.—A four-story brick building, measuring 80' x 160', is soon to be built on Commercial, cor. Richmond St., for the Quincy Market Cold Storage Corporation. Chase's system of refrigeration is to be used, and some 10,000 tons of ice will be stored in the upper story for cooling purposes. The ground has been excavated and piles will be driven at once; estimated cost, \$60,000; Wm. G. Preston, of Boston, architect.
SEWER CONNECTIONS.—No more permits to connect drains with sewers will be given after Dec. 10, 1881, until spring.
PUMPING STATION.—New buildings will be put up at the pumping station at Dorchester Bay. They will be of granite, covering an area of 24,000 sq. feet, and costing \$176,000.

Brooklyn.

BUILDING PERMITS.—Lafayette Ave., s s 100' w Nostrand Ave., 3 two-story brick dwellings; cost, \$3,000;

owner, A. Miller, 373 Decatur St.; architect, T. Miller.
Nugent Ave., n e cor. Monroe St., three-story brick store and dwell.; cost, \$8,000; owner, L. P. McHenry, 583 Monroe St.; architect and builder, John McGarry.
Elizabeth St., s s 200' e Dwight St., one-story brick shop; cost, \$5,000; owner, The Cramp Dry Dock Co., 14 William St., New York; architects and builders, S. E. Simpson & Co.
Saydam St., n s 118' w Bushwick Boulevard, two-story frame stable; cost, \$2,000; owner, John B. Froehlich, Saydam St., cor. Bushwick Boulevard; architect, J. Platte, builders, W. Dafelecker, and R. B. Ferguson.
Bushwick Ave., or Boulevard, w s 83' n Saydam St., 2 two-story and a half-story frame dwellings; cost, \$2,500; owner, architect and builder, same as last.
Scholar St., n s 20' e Bushwick Ave., three-story frame ice-house; cost, 11,000; owners, Ochs & Lehner, on premises; architect, J. Platte, builders, Henry Gramann and Joseph Frisse.
Trotman St., No. 185, two-story frame dwell.; cost, \$2,500; owner, Frederick Wolf, 183 Troutman St.; builder, Henry Loeffler.
Jefferson St., n s 35' e Bedford Ave., 5 three-story brownstone flats; cost, each, \$8,000; owner and builder, A. G. Van Wagner, 518 Lexington Ave.; architects, Parlin & Bros.
Forth St., s s 57' 9" w Throop Ave., 5 two-story brownstone dwellings; cost, each, \$4,000; owner and builder, C. Ibbell, 479 Herkimer St.
Hatching on Ave., Atlantic Ave., 4 four-story brownstone dwellings; cost, each, \$8,700; owner and builder, T. A. Hansen, 41 Madison St.
Fulton St., Nos. 36 and 38, s s 125 e Marcy Ave., four-story brick factory; cost, each, \$3,000; owner, North American Iron Works, 40 and 42 Walton St.; builders, J. Auer & J. Schneider.
Newport St., e s 125' s Myrtle Ave., three-story brick mill; owner, James Barragh, Willoughby Ave., near Pompano Ave.; architect, M. J. Morrill; builders, C. Cameron and Thos. E. Greenland.

Chicago.

CALUMET CLUB.—n e cor. Michigan Ave. and Twentieth St., 82' 6" x 110', four-story, is to be built of brick. The general type of the design is that of the front-chateau of the early Renaissance. In the exterior design carved terra-cotta is used with some freedom and it is enriched with bands and string-courses. The main entrance is on Twentieth St. The entire work of erecting, decorating, and furnishing the building, which it is estimated will cost \$2,000,000, is under the supervision of Burnham & Root, architects.
H-STAR.—E. B. Sheldon, three-story brick dwell., 78' x 9', Lincoln Ave., near Wisconsin St.; cost, \$20,000; Burling & Whitehouse, architects; Louis Welch, builder.
BUILDING PERMITS.—E. B. Sheldon, three-story brick dwell., 78' x 90', Lincoln Ave., near Wisconsin St.; cost, \$20,000.
L. T. Sumner, two-story brick dwell., 21' x 47', 3856 Dearborn Ave.; cost, \$3,300.
J. L. Campbell, two-story brick dwellings, DeKalb St., near Polk St., 32' x 160'; cost, \$18,000.
H. A. Austwick, two-story brick dwell., 23' x 41', DeKalb St., near Polk St.; cost, \$3,300.
C. Reelin, two-story brick dwell., 22' x 51', 127 Tremont St.; cost, \$1,400.
Fred Henckel, three-story and basement brick store and dwell., 24' x 70', 316 West Randolph St.; cost, \$5,000; J. Paul Huber, architect; Wildner & Frank, builders.
E. P. H. Reynolds, 2 two-story brick dwellings, 40' x 50', 3813 Langley Ave.; cost, \$7,000.
John Mountain, three-story brick flat, 22' x 60', 226 Sedgewick St.; cost, \$7,000.
J. G. Earle, s two-story and basement brick dwellings, 12' x 25', 247 Thirty-seventh St.; cost, \$1,000.
B. Grossman, three-story and basement brick stores and flats, 3128 to 3132 Cottage Grove Ave.; cost, \$10,000.
Lutheran Trinity Congregational School, two-story brick school-house, 27' x 80', 3014 Lyman St.; cost, \$12,000.
W. Brooks, three-story brick dwell., 21' x 58', 777 Larrabee St.; cost, \$1,500.
Geo. Heeger, two-story and basement brick dwell., 20' x 34', 753 Hinman St.; cost, \$2,000.
Eich Bros., 10 two-story brick dwellings, 40' x 160', Monroe St., near Campbell Ave.; cost, \$30,000.
W. F. Whitehouse, five-story and basement brick store, 41' x 110', Adams St., near Fifth Ave.; cost, \$3,000; Burling & Whitehouse, architects; C. G. Mullen & Co., builders.
C. Steltz, two-story brick dwell., 24' x 67', 109 Lincoln Ave.; cost, \$5,000.
Lafin, Van Houten & Co., four-story brick store, 40' x 71', 71 and 73 Randolph St.; cost, \$10,000.
A. Bauman, one-story brick dwell., 20' x 60', 58 High St.; cost, \$2,100.
H. Channon, one-story brick ice-house, 28' x 128', Goose Island; cost, \$4,000.
M. Murphy, two-story and basement brick stable, 75' x 100', Pacific Ave., near Harrison St.; cost, \$12,000.

New York.

BUILDING PERMITS.—One Hundred and Twenty-fourth St., s s 200' e Eighth Ave., 3 four-story brownstone flats; cost, each, \$15,000; owner, Wm. H. Van Antwerp, 15 East Forty-fourth St.; architect, J. H. Valentine.
Seventy-ninth St., n s 100' e Fifth Ave., four-story brick and stone dwell.; cost, \$40,000; owner, Wm. H. Van Antwerp, 15 East Forty-fourth St.; architect, W. H. Cavett; mason, Joseph Smith.
East One Hundred and Nineteenth St., No. 511, four-story brownstone flat; cost, \$15,000; owner, Charles F. Truig, 310 East One Hundred and Twenty-first St.; architect, R. Rosenstock.
One Hundred and Twenty-ninth St., s s 40' e Eighth Ave., 4 three-story brownstone dwellings; cost, each, \$15,000; owner and architect, same as last.
New Pier 56 North River, one-story wood and iron freight-shed; cost, \$25,000; owner, Simpson & Spence, 87 Broome St.; builder, D. McCarthy.

Seventy-fifth St., s s 150' w Fourth Ave., 4 four-story Connecticut brownstone dwellings; cost, each, \$22,000; owner, Terence Farley, 165 East Sixty-first St.; architects, Thom & Willson.
West St., w s, Piers 20 and 21, North River between Reade and Duane Sts., one-story frame and iron freight shed; owner, New York, Lake Erie & Western Railroad Co., 21 Courtlandt St.; builders, J. H. Euler & Bro.

Seventy-eighth St., n s 250' w First Ave., four-story brick tenement; cost, \$15,000; owner, Ferdinand Hemmerling, 1203 Lexington Ave.; architect, John Brant.
Fourth St., n s 225' w Tenth Ave., three-story brick stable; cost, \$5,000; owner, David Stevenson, Jr., Tenth Ave., cor. Thirty-eighth St.; architect, H. J. Dudley, builder, Sam'l Lowden.

ALTERATIONS.—East Seventy-eighth St., No. 138, raised one story, also four-story brick extension, interior alterations, etc.; cost, \$10,000; owner, Hester A. Cowing, on premises; architect, A. B. Ogden.

West Twenty-third St., No. 16, one-story brick extension, interior and front alteration; cost, \$10,000; owner, John L. Cavanagh, 1107 Broadway; architect, A. Craig.

Thirteenth St., s s 180 e Eleventh Ave., one-story brick extension; cost, \$10,000; owner, Cornelius Delamater, foot West Thirteenth St.; architect, G. H. Reynolds.

One Hundred and Eleventh St., n s 127' w Madison Ave., one-story brick extension; cost, \$3,500; owner and builder, Jas. F. Treacy, 128 East One Hundred and Eleventh St.; architect, R. Rosenstock.

APARTMENT-HOUSE.—The Charter property in Thirty-fourth St., is about to be improved by the erection of eight-story flats; costing about \$250,000; Mr. Horace G. Knapp is the architect.

HOUSE.—Dr. Robert M. Heyolds is having designs prepared for residence, to be built on Ninety-third St., between Eighth and Ninth Aves. The building will be 56' x 56'; cost, \$15,000; H. G. Knapp is the architect.

STORES.—No. 23 Great Jones St., formerly the old Spanish Hotel is to be transformed into a brick front store, the size is 25' x 35'; owner, Jas. M. Shanahan; architect, J. Gandolfo.

On the south side Broadway, between Houston and Bleeker St., an iron front store, 50' x 200', six-story, basement and amb cellar; to be erected for \$100,000; is to be erected from designs of Messrs. H. J. Schwarzmann & Co.

FACTORY ON SIXTY THIRD ST.—Between Second and Third Aves., a cigar factory, 5' x 90', six-story and basement, brick front; to cost \$30,000, is to be erected for Belvin & Sieber, from designs of H. J. Schwarzmann & Co.

STABLES.—Mr. J. Gandolfo has prepared plans for a stable No. 115 West Fifty-second St., 25' x 90', two-story high, to be built of Philadelphia brick with bluestone trim.

STORAGE WAREHOUSE.—The new Morrell storage warehouses are to be built from designs of Mr. M. C. Merritt.

Philadelphia.

BUILDING PERMITS.—Edmund L. of Orthodox St., 2 two-story dwellings, 16' x 40', W. Reas, contractor.
Orchard St., n of Tacony St., 6 two-story dwellings, 15' x 40'; G. F. Gibson, Jr., contractor.
Columbia Ave. and Spethman St., three-story carpenter building, 32' x 70'; D. M. Blyler, contractor.

Brook St., Nos. 1317 and 1319, six-story storehouse, 36' x 125'; L. Koder, contractor.

Kennington Ave., s of Lehigh Ave., 6 three-story dwellings, 16' x 44'; W. D. Carter, contractor.

Twenty-first St., between Brown and Fairhill Sts., 10 three-story dwellings, 17' x 54'; Jas. Craverton, contractor.

Lehigh Ave., s of Orthodox St., three-story dwell. and brick building, 16' x 38'; Jane Darrell, owner.

Fifth St., n of Cumberland St., one-story marble shop, 16' x 120'; J. W. Silvis, owner.

Kennard St., s of Columbia St., two-story dwell. and two-story stable; W. Tecklenberg, contractor.

Railroad Station, M'K, front house, 30' x 100'; Reading R. R. Co., owners.

Lehigh Ave. and Fairhill St., three-story dwell., 20' x 60'; Jacob Farber, contractor.

Pasayunk Ave., No. 1012, one-story boiler-house, 18' x 41'; B. H. Bartol, owner.

Brooks Ave., between Fifty-fourth and Fifty-fifth Sts., two-story factory, 35' x 81'; Theo. Brooks & Son, owners.

Reese and Hamilton Sts., four-story factory and engine-house, 45' x 128', and 28' x 48'; R. J. White-side & Sons, contractors.

North Twenty-second St., No. 131, two-story factory rebuilding, 60' x 75'; F. Hall, contractor.

York and Ontario Sts., 11 dwellings, 13' x 49'; James E. Cooper, owner.

North Broad St., Nos. 212 and 244, two-story addition to storehouse, 70' x 90'; Percival Roberts, Pennsylvania Iron Works.

Randolph St., No. 1716, four-story addition to factory, 23' x 30'; R. S. Forner & Son.

Kennington Ave., alteration of factory, alteration of 2 stores; Thos. McCracken, owner.

CHURCH.—The friends of the late President of the Pennsylvania R. R. Co. have determined to erect a Memorial Church. It is proposed to raise \$50,000 to build it. The church is to be mainly for the use and benefit of the employees of the Pennsylvania R. R. Co.

FACTORY.—It is the intention of Messrs. W. H. and G. W. Allen to build a five-story factory building on Race St., w of Second St., to be of brick and iron; the building to be used for light manufacturing purposes.

CHURCH.—The corner-stones of the new Swedenborgian Church, at 400 e cor. of Twenty-second and Chestnut Sts., was laid Nov. 24. The building will be 64' x 99' 1/2' of masonry; the total cost, exclusive of furniture, will be about \$32,000.

St. Louis.

BUILDING PERMITS.—Eighty-four permits have been issued since our last report, nine of which are for

SUMMARY.—

Burning of the Ring Theatre in New York.—The Ring Theatre, Brooklyn Bridge.—An

A TRIP ABROAD.—THIRD CHRISTMAS-CARD COM

OUR VERNACULAR ARCHITECT

PRACTICAL SCIENCE IN ENGL

THE ILLUSTRATIONS.—

Design for a Hotel Billin

den, Germany.

THE DISPOSAL OF REFUSE IN

THE MOSQUE OF ORHIDA AT

GAS ENGINES.

DANGEROUS CHIMNEYS.

LINE AS A PRESERVATIVE.

A CANAL IN THE FAR EAST.

COMMUNICATIONS.

The Recent Test of Fire

Doors.—An Explanatio

NOTES AND CLIPPINGS.

A FRIGHTFUL accident w

issue of last week was plac

Ring Theatre, a large str

of the city, took fire at sev

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and the iron screen provi

auditorium was not lower

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in so many similar cases,

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were burned through. A

flagration the gas went on

struggling crowd, were le

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all retreat. Out of two

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by the crowd below, but

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This awful catastrophe is

is of all the great Europe

building is the most in vo

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have seemed absolutely in

LATER accounts only ad

occurrence. It appears th

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fire. Firemen are also r

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BUILDING INTELLIGENCE.

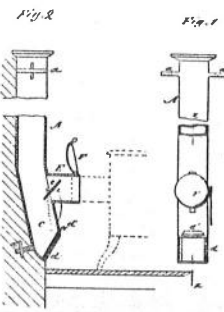
(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

248,307. SMOKE-FLUE.—Constantine L. Brady, St. Louis, Mo. The flue A, which is of sheet or cast iron, and square in cross section, is intended to take the place of the brick chimneys in frame houses, and to be built in the walls of brick houses, or it may be inserted in the smoke-flues of houses already built. To support the flue in place in the chimney, arms, *aa*, are provided at or near the top of the flue and the arm *a'* near the bottom, which hold the flue firmly. The lower portion of the flue is bent or curved inward, so that the open end *d'* is inside of the house, a short distance above the floor, and is closed by the sliding door *d'*. The horizontal pipe-connection E reaches through the wall, and is provided with the damper *c*, which is nearly in line with the front wall of the flue, in which position it serves also to prevent the pipe coming



from the stove being inserted too far into the flue. The extension E, when not in use, is closed by the hinged cap F, which is held in place by a suitable device. It will be understood that the flue should be provided with as many pipe connections E as there are stoves to the house, though only one is shown in the drawings, and from the construction of the flue it will also be understood that the flue is practically self-cleaning, as the ashes and soot will not adhere to the smooth metal surfaces of the flue, but will fall to the soot-chamber C, which is formed by the flue being extended below the pipe-extension E, so that soot can be easily removed from the inside of the house by simply raising the sliding door *d'*. Between the stove-pipe extensions E of the different stories, the flue may be surrounded with fire-clay sections, if desired, thus avoiding all possible danger of fires from the flue.

250,626. CONTOUR-MEASURING TOOL.—Henry O. Barker, Sedalia, Mo.

250,639. VENTILATOR WHEEL OR FAN.—James M. Bickman, Chicago, Ill.

250,611. CHAIN-WRENCH.—William H. Brock, Corona, N. Y.

250,631. EARTH-BORING APPARATUS.—John R. Parth, Bloomfield, Io.

250,662. KNOB ATTACHMENT.—George M. Hathaway, New York, N. Y.

251,678. BIT AND DRILL STOCK.—Wallace Lyon, Bridgeport, Conn.

250,673. VISE.—Alphonse Montant, New York, N. Y.

250,714. PAINT-VEHICLE.—Nelson H. Coope, Oil City, Pa.

250,728. TAP AND DIE.—Hayward A. Harvey, Orange, N. J.

251,742. AUTOMATIC CUT-OFF FOR RAIN-GUTTERS.—Christian W. Myers, Lincoln, Pa.

250,765. BOX-JOINT FOR SEWER-PIPES.—James Thompson, Chicago, Ill.

250,778. EARTH-AUGER.—Llewellyn A. Blake, Corheana, Tex.

250,807. STONE-SAWING MACHINE.—Thomas W. Hardie, New York, N. Y.

250,828. SASH-HOLDER.—David F. McKittrick, Marysville, O.

250,857. PORTABLE HOUSE.—William H. Wrigley, Oakland, Cal.

250,901. FIRE-ESCAPE.—J. Paris Dunn, Brooklyn, N. Y.

250,912. FIRE-EXTINGUISHER.—Frederick Grinnell, Providence, R. I.

250,932. FIRE-EXTINGUISHER.—Frederick Grinnell, Providence, R. I.

250,933. SAWSET.—Martin Marshall and Hugh J. McDevitt, Philadelphia, Pa.

250,933. MANUFACTURE OF COLUMNS, POSTS, ETC., OF GLASS.—Christopher W. McLean, New Bern, N. C.

250,935. AUTOMATIC FIRE-EXTINGUISHER.—Jonathan C. Meloon, Providence, R. I.

250,963. AUTOMATIC FIRE-EXTINGUISHER.—Henry S. Parmelee, New Haven, Conn.

251,018. ARTIFICIAL MARBLE.—Virginia J. Watts, Baltimore, Md.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—Since our last report, 19 permits have been granted, of which the more important are as follows:—

Jacob Saun, two-story brick buildings, Parish Alley, 216' of Prestman St.

Chas. E. Blaney, 4 three-story brick buildings, Lafayette Ave., beginning at the s. w. cor. of Mount St.; also, 6 three-story brick buildings, Mount St., s. of the above.

E. E. Jackson & Co., two or three-story brick buildings, s. e. cor. East Falls Ave. and Stiles St.

Aug. Knop, two-story brick stable, Burgunder Alley, s. of Cross St.

Presbyterian Congregation, (colored), new brick and stone front to church building, Madison St., between Park Ave. and Cathedral St.

A. Mahone, 12 three-story brick buildings, Mount St., between Mosher and Townsend Sts.

A. Mahone, 5 three-story brick buildings, Mosher St., between Mount and Gilmore Sts.

A. Mahone's two-story brick buildings, Vincent Alley, between Mosher and Townsend Sts.

Chas. W. Rockefeller, 9 three-story brick buildings, n. w. cor. Mount and Mosher Sts.; also, 5 three-story brick buildings, Mosher, w. of Mount St.

House, Mr. Geo. A. Blake, builder, has begun the erection of a dwelling-house, 6' x 72', on St. Paul St., near John St., for Mr. Isaac Wiman; cost over \$100,000; Messrs. McKim, Mead & White, of New York, architects.

Boston.

BUILDING PERMITS.—Brick.—42 to 48 Channing St., (rear) Ward 10, for Wm. H. Stoenmb and Leopold Morse, iron building for storage, 12' x 33'; Stephen B. Trofion, builder.

N. St., near Fifth St., Ward 14, for Caleb Kimball, 2 dwell., 21' x 32', 2-st'y; Caleb Kimball, builder.

Wood, Mr. Unnamed, near Stark St., Ward 4, for B. S. Barrett, dye-house, 20' x 30'; N. H. Hunnewell, builder.

Walden Ave., rear of, near Dale St., Ward 21, for Arthur W. Tufts, dwell., 20' x 20'; Isaac Sprague, builder.

Unamed St., near Washington St., Ward 24, for Sam'l Albertson, 3 dwell., 25' 6" x 34', two-st'y, hip roof; S. M. Chesley & Co., builder.

Sargent St., cor. Harvard Ave., Ward 20, for Alonzo P. Clifford, dwell., 18' x 37', two-st'y; Alonzo P. Clifford, builder.

4 to 6 Sargent St., Ward 20, for Alonzo P. Clifford, 2 dwell., 22' x 31', two-st'y, L, 16' x 18'; Alonzo P. Clifford, builder.

S. Sargent St., Ward 20, for Alonzo P. Clifford, dwell., 20' x 31', two-st'y; Alonzo P. Clifford, builder.

M. St., near East Third St., Ward 14, for Wm. T. Eaton, 4 dwell., 20' x 32', L, 16' x 20', two-st'y and mansard; Wm. T. Eaton, builder.

Church St., rear of, near St. Vernon St., Ward 25, for John Brennan, wagon-shed, 18' x 24'; John Brennan, builder.

West Sixth St., rear of C St., Ward 13, dwell., 22' 6" x 42' 8"; three-st'y; owner, Hugh Gibbin; Edward Lynch & Co., builders.

Brooklyn.

BUILDING PERMITS.—South Elliott Pl., Nos. 73 and 75, one-story brick livery stable; cost, \$2,000; owner, John Gallagher, 66 Schermerhorn St.

Eight Ave., n. w. cor. Sackett St., 3 four-story brownstone dwell.; owners and builders, J. Doherty & Son, 280 Flatbush Ave.

Even St., e. s. cor. Frost St., three-story frame tenement; cost, \$3,450; owner, John Weying, Even St., near Frost St.; architect, John Platte; builder, C. Wiber.

Decatur St., s. s. 250' w. Reid Ave., 7 two-story dwell., cost, \$7,000; owner, William H. Wells, 67 Liberty St., New York; architect, G. Nichols.

Bedford Ave., Nos. 525, 526 and 530, being 237' s. De Kalb Ave., 3 four-story brownstone tenements; cost, each, \$12,000; owner and builder, E. Freil, 434 Lafayette Ave.; architect, Hugo Kalfa.

ALTERATIONS.—Degraze St., s. s. about 175' e. Bond St., one-story frame extension; cost, \$3,000; owners, Nelson & Holden.

HOSPITAL.—The following award has been made in the competition for the Sevey Brooklyn Methodist Episcopal Hospital: 1st, J. Mumford, Brooklyn; 2d, Marcein Thomas, Brooklyn; 3d, F. C. Merry, New York. There were in all nine competitors.

Chicago.

BUILDING PERMITS.—C. W. Mencham & Co., 6 two-story basement brick dwell., 32' x 120', cor. Tremont St. and Garfield Ave.; cost, \$18,000.

F. Keller, 6 two-story and basement brick dwell., 21' x 56', La Salle St., near Schiller St.; cost, \$8,000.

F. R. Otis, 2 five-story and basement brick stores, 60' x 100', 236 to 240 State St.; cost, \$40,000.

John Norden, two-story brick store, 25' x 43', 236 Townsend St.; cost, \$3,000.

Henry Strong, five-story and basement brick store, 50' x 176', Adams St., near Fifth Ave.; cost, \$75,000.

E. P. Yates, two-story and basement brick stable, 40' x 116', 16 South Sangamon; cost, \$3,000.

Union Iron and Steel Co., one-story brick boiler-house and iron merchant mill, 170' x 206', cor. Ashland and Archer Aves.; cost, \$25,000.

Seth Gage, two-story brick dwell., 20' x 48', 141 Seminary Ave.; cost, \$4,000.

William Gage, three-story brick store and dwell., 47' x 60', Wentworth Ave., near Twenty-sixth St.; cost, \$8,000.

Charles Korup, 2 two-story and basement brick flats, 44' x 54', Twelfth St., near LaSalle St.; cost, \$9,000.

John W. Buckley, two-story brick livery stable, 50' x 120', South Park Ave., near Thirty-third St.; cost, \$13,000.

N. W. Bradley, two-story brick store and dwell., 24' x 56', 40 Sholto St.; cost, \$1,000.

M. Kline, two-story brick iron works, 24' x 50', Van Buren, near Jefferson St.; cost, \$2,500.

John V. Gorman, two-story brick store and dwell., 20' x 50', cor. Hinman St. and Ashland Ave.; cost, \$3,300.

B. J. Etzelshon, four-story brick store and flats, 40' x 60', State St., near Sixteenth St.; cost, \$8,000.

B. A. Brooks, two-story brick dwell., 25' x 50', 1077 Jackson St.; cost, \$8,000.

W. E. Murray, two-story brick store and dwell., 50' x 60', State St., near Sixteenth St.; cost, \$8,000.

F. Campbell, 5 one-story brick cottages, 20' x 30' each, Thirteenth St., near Hogan Ave.; cost, \$1,000.

A. C. Yund, 2 one-story brick cottages, 21' x 32' each, Leavitt St., near North Ave.; cost, \$2,400.

Cincinnati.

BUILDING PERMITS.—The following permits have been issued since our last report.

G. C. Glasgow, three-story brick building, 54 West Seventh St.; cost, \$1,000.

Chas. Ulrich, two-story brick buildings, n. e. cor. of Laun and Richmond Sts.; cost, \$3,700.

Six permits for repairs, costing \$1,700.

DEPOSIT.—The work of tearing down the old buildings on Third St. and Central Ave. is now under way to make room for the new Union Depot.

HORSE.—Mr. J. M. Potter is to build a brick house on Nassau St., opposite St. James Ave.; cost about \$10,000; George W. Rapp, architect.

New York.

BUILDING PERMITS.—Nineteenth St., n. s. 133' 9" w. Avenue D, one-story brick factory; cost, \$2,000; owners, Schenck & F. New, Treutheit St., 165' w. Avenue B, architect and mason, T. New.

Wall St., No. 110, four-story brick office-building; cost, \$15,000; owner, James H. Jones, Bartow, Westchester Co.; architects, J. & J. McKim, masons, E. D. Connolly & Son; carpenter, John Geagan.

Seventy-second St., s. s. 200' e. Second Ave., 6 three-story brick brownstone front dwell.; cost, each, \$5,000; owner, Michael Duffy, 1812 Third Ave., architect, Andrew Spence.

West Twenty-eighth St., No. 27, three-story factory, cost, \$3,000; owners, Alanson Cary, 11 East Forty-third St. and Edward A. More.

Tenth Ave., w. cor. Dykman Ave., three-story brick factory, owner, Kate S. Bruckman, 241 West Forty-fourth St.; architect, Durand Woodman, builder, J. Lyons.

Bleecker St., No. 99, rear, one-story brick workshop; cost, \$2,000; lessee, Elias Hyams, 311 West Thirty-first St.; architect and builder, Wm. T. Roylance.

Canal St., No. 409, four-story brick office building and store; cost, \$1,000; owner, Chas. F. Friedland, 493 Canal St.; architect, Wm. Howe.

West One Hundred and Twenty-fourth St., No. 113, four-story brick brownstone front flat; cost, \$15,000; owner, Catharine Fetterloch, 111 West One Hundred and Twenty-fourth St.; D. F. Macrae; builder, John Fetterloch.

Concord Ave., w. s. 138' n. One Hundred and Sixty-third St., two-story frame dwell.; cost, \$2,000; owner, May A. Bigelow, 1001 Madison Ave.; architect, W. W. Gardner; builder, Peter P. Decker.

One Hundred and Fourteenth St., s. e. 100' e. Third Ave., 4 three-story brick (stone front) dwell.; cost, each, \$7,500; owner, Charles Van Fleet, 272 Bergen St., Brooklyn; architect, J. E. Styles.

ALTERATIONS.—Twenty-first St., s. s. 75' w. Third Ave., raise roof three feet; interior alterations; cost, \$5,000; owner, August C. Hassey, 235 East Fourth St.; architect, Wm. Graub.

Third Ave., s. e. cor. One Hundred and Sixty-first St., frame structure on top of building for beer cooler; cost, \$2,000; owner, A. Hupfel & Sons, n. e. cor. Broadway; architect, Charles Stoll.

BUILDING MATERIALS.—Brick are unchanged. Road-cement has advanced, and is firmly held at \$1.50 per bbl. in New York. Lime seems to look like advancing, and laths show an upward tendency.

AQUARIUM-BUILDING.—The site of the old aquarium has now been definitely sold for building purposes. It is at present, however, very doubtful as to what purpose the new building will be. Very probably it will be a theatre.

FLAT.—A flat for four families is to be built at No. 113 West One Hundred and Twenty-fourth St., 25' x 60', brownstone front; cost, \$15,000; Catharine Fetterloch is the owner.

Philadelphia.

BUILDING PERMITS.—Sixteenth and Callowhill Sts., two-story stable-building, 37' x 150'; Reading R. R. Co., owners.

Twenty-first St., s. of Parrish St., 10 three-story dwell., 16' x 46'; Jno. McGill, owner.

Emerald St., n. of Clearfield St., three-story dwell., 18' x 46'; J. C. Stackhouse, contractor.

Ella St., e. of Amber St., three-story dwell., 12' x 30'; L. L. Yates, contractor.

State Road, n. of Friendship St., 2 two-story dwell., 16' x 42'; Crosta & Rother, contractors.

Eighteenth St., n. of Packer St., 7 three-story dwell., 16' x 42'; Jos. Stucky, owner.

Brown St., No. 1027, three-story dwell., 17' x 60'; Benj. Ketcham & Son, owners.

ALTERATIONS AND ADDITIONS.—Twenty-third and Cherry Sts., two-story addition to laundry, 18' x 60'; Richards & Shourds.

Sixteenth and Bottomwood Sts., one-story addition to boiler-house, 40' x 100'; Jas. Moore, owner.

CHURCH.—The Trustees of the Trinity M. E. Church have purchased a lot at the corner of Fifteenth and Mt. Vernon Sts., at a cost of \$32,000, on which it is proposed to erect a new church.

HOSPITAL.—To be erected at the University Hospital a wing for incurables, M. B., 48' x 84', ward extension, 32' x 80', three stories high, to be of pressed brick and brownstone, and terra-cotta finish; cost, \$65,000; J. Erickson, contractor; George Hewitt, architect.

LABOR MARKET.—The Journeymen Bricklayers' Association has established the rate for the season of 1902 at \$1.50 per day, and nine hours on Saturdays, to go into effect on the first Monday in April, 1902.

THE AM

VOL. X.

DECEMBER

Entered at the Post Office

SUMMARY:—

Death of George Edmund

partment of Buildings—

The Necessity for further

Wallack's Theatre, New

Light Accident.—Seaford

tional Museum at St.

Suit.—A French Work

FIFTEENTH ANNUAL REPORT

SCULPTURE AND SCULPTORS.

NEW YORK ILLUSTRATED.

CAN AN ARCHITECT RECOVER

THE ILLUSTRATIONS:—

Ruins of the Hippodrome at

St. Stephen's Church at Cl

House.—Design for Cl

LEGAL NOTES AND CASES.

THE BERGSTRUP AT ELK.

ACOUSTIC VARI.

COMMUNICATIONS:—

Theatre Stage Ventilators

Materials.—The Durabi

NOTES AND CLIPPINGS.

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THE Fireman's Journal

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